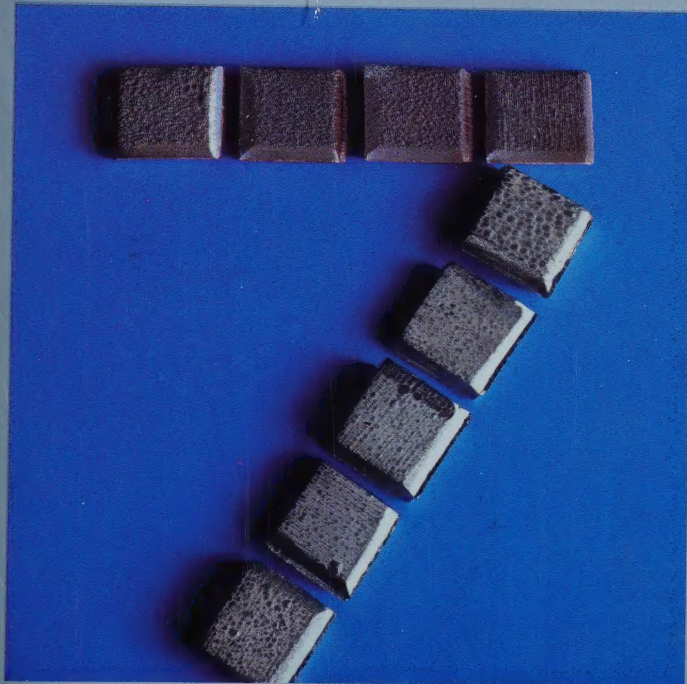
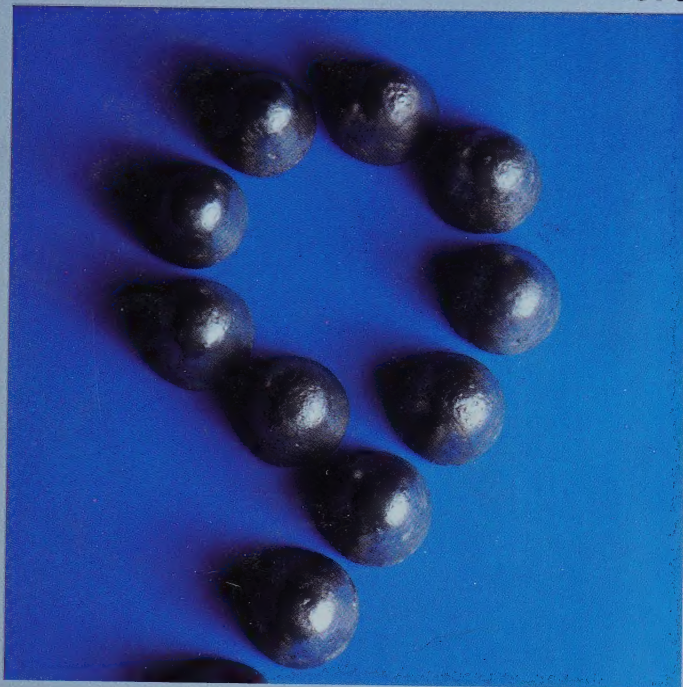


## FALCONBRIDGE NICKEL MINES LIMITED ANNUAL REPORT

1979







SUMMARY OF CONSOLIDATED RESULTS	1979	1978
<b>Financial:</b>		
Earnings before extraordinary item .....	\$ 110,561,000	\$ 5,818,000
— per convertible share .....	\$21.01	22¢
Earnings for the year .....	\$ 130,561,000	\$ 5,818,000
— per convertible share .....	\$25.03	22¢
Revenues .....	\$ 789,418,000	\$508,211,000
Dividends per convertible share .....	\$3.00	Nil
Assets .....	\$1,069,371,000	\$868,525,000
Working capital .....	\$ 380,883,000	\$254,784,000
Shareholders' equity per convertible share .....	\$83.77	\$61.94
Return on total assets less current liabilities .....	16.3%	1.7%
<b>Metal sales prices</b> (average for year — U.S. currency):		
Refined nickel (per pound) .....	\$2.31	\$1.94
Ferronickel (per pound) .....	\$2.41	\$1.82
Copper (per pound) .....	93¢	64¢
Cobalt (per pound) .....	\$29.12	\$12.25
*Gold (per ounce) .....	\$367.61	\$205.55
*Silver (per ounce) .....	\$16.64	\$5.77
Platinum (per ounce) .....	\$421.47	\$254.41
<b>Metal sales:</b>		
Nickel in all forms (pounds) .....	137,277,000	118,361,000
Copper (refined and in concentrate) (pounds) ..	149,192,000	140,647,000
Cobalt (pounds) .....	1,502,000	1,255,000
*Gold (ounces) .....	129,000	161,000
*Silver (ounces) .....	5,150,000	5,607,000
Platinum (ounces) .....	16,000	9,000
* Includes equity accounted for companies.		

**Highlights:**

Record revenues and earnings.

Assets exceed one billion dollars.

Highest-ever prices for nickel, cobalt, gold, silver and platinum.

Nickel inventories, in all forms, were reduced to more normal levels.

Certain properties at which operations were curtailed in 1977 and 1978 were phased into production during 1979.

## Contents

### SUMMARY

**Inside Front Cover**

### CORPORATE INFORMATION

**2**

### DIRECTORS AND OFFICERS

**3**

### REPORT OF THE DIRECTORS

**5**

### AUDITORS' REPORT

**15**

### ACCOUNTING POLICIES

**16**

### FINANCIAL STATEMENTS

**18**

### TEN-YEAR REVIEW

**33**

### INTEGRATED NICKEL OPERATIONS Including Marketing Group Activities

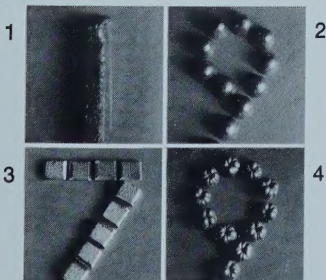
**37**

### MAJOR SUBSIDIARY AND ASSOCIATED COMPANIES

**42**

**ANNUAL MEETING OF SHAREHOLDERS**  
TUESDAY, APRIL 15, 1980  
10:00 A.M. (TORONTO TIME)  
COMMERCE HALL  
CONCOURSE LEVEL, COMMERCE COURT  
TORONTO, ONTARIO

#### COVER DESIGN



1. *Ferronickel Ingot*
2. *Ferrocones*
3. *Copper and Nickel Squares*
4. *Nickel Crowns*





# FALCONBRIDGE NICKEL MINES LIMITED

## Offices

Corporate Offices — P.O. Box 40,  
Commerce Court West, Toronto,  
Ontario, Canada M5L 1B4  
Telephone (416) 863-7000  
Telex 065-24211. Cables "Falconbrij"

Sudbury Operations, Main Office —  
Falconbridge, Ontario P0M 1S0

Vancouver Office —  
1112 West Pender Street,  
Vancouver, B.C. V6E 2S1

## Among Wholly-Owned Operations

### Falconbridge Nikkelverk Aktieselskap

Kristiansand S., Norway  
G. Lous — Chairman of the Board  
E. Wigstol — Managing Director

### Wesfrob Mining Division

1112 West Pender Street,  
Vancouver, B.C. V6E 2S1  
P. L. Munro — President  
C. L. Stafford — Mine Manager,  
Tasu, Queen Charlotte Islands, B.C.

### Canadian Nickel Division

A. G. Slade — President, and  
General Manager Sudbury Operations

### Sudbury Operations, Ontario —

**Mines** — Falconbridge, East,  
Strathcona, North\*, Onaping,  
Lockerby

**Mine Under Development** — Fraser

**Concentrators** — Falconbridge,  
Strathcona

**Smelter** — Falconbridge

## Marketing Subsidiaries

### Falconbridge International Limited

Gibbons Building, Queen Street  
Hamilton 5-31, Bermuda  
Telephone (809) 292-4700  
Telex 290-3479  
Rapifax: 809-292-5441

### Falconbridge Europe S.A.

150 Chaussée de La Hulpe — Bte. 15  
B-1170 Brussels  
Belgium  
Telephone: (02) 673-99-50  
Telex: (046) 23280  
Rapifax: (02) 660-64-82

### Falconbridge U.S. Incorporated

Seven Parkway Center  
Suite 450  
Pittsburgh, Pennsylvania 15220  
U.S.A.  
Telephone: (412) 922-0100  
Telex: 866-507  
Rapifax: 412-922-5515

### Falconbridge Canada

P.O. Box 40, Commerce Court West  
Toronto, Ontario, Canada M5L 1B4  
Telephone: (416) 863-7000  
Telex: 065-24211  
Rapifax: 364-8986

## Products

Products of Falconbridge Nickel Mines Limited and affiliated companies include nickel, copper, cobalt, gold, silver, platinum, palladium, iridium, rhodium, ruthenium, selenium, lead, iron ore, zinc, cadmium, nepheline syenite, silica, feldspar, mica, limestone aggregates, liquid sulphur dioxide, carbon and high-alloy steel castings, and other products for consumer and industrial use.

## Research Laboratories

Falconbridge Metallurgical Laboratories,  
Richmond Hill, Ontario; Kristiansand S.,  
Norway.

## Exploration Offices

Toronto, Sudbury and Timmins, Ontario;  
Quebec City, Quebec; Vancouver, B.C.;  
Winnipeg, Manitoba; St. John's,  
Newfoundland; Santo Domingo,  
Dominican Republic; Oslo, Norway;  
Johannesburg, South Africa; Windhoek,  
South West Africa; Gaborone, Botswana;  
and Manila, Philippines.

## Solicitors

**Tilley, Carson & Findlay**, Toronto

## Auditors

**Clarkson Gordon**, Toronto

## Transfer Agents and Registrars

**Crown Trust Company**, Toronto,  
Montreal, Vancouver and Calgary

## Registrar and Transfer Company

New York and Cranford, N.J., U.S.A.

## Stock Exchanges

The shares of Falconbridge Nickel Mines Limited are listed on the Toronto, Montreal and Vancouver stock exchanges.

The shares are also traded Over-the-Counter in the United States. The NASDAQ symbol is FALCF.

(\* Temporarily closed; on stand-by)

## Director Emeritus

C. F. H. CARSON, Q.C.

## Board of Directors

H. T. BERRY,  
Senior Vice-President Metallurgy and Research

\*MARSH A. COOPER,  
President and Chief Executive Officer

†O. D. COWAN,  
A director of a number of companies

W. G. DAHL,  
Senior Vice-President Marketing

\*R. E. HARRISON,  
Chairman and Chief Executive Officer,  
Canadian Imperial Bank of Commerce

†ROBERT HEWITT,  
Chairman,  
Hewitt Equipment Limited

H. R. HIRSCH,  
Senior Vice President,  
The Superior Oil Company

\*W. F. JAMES,  
Consulting Geologist

\*H. B. KECK,  
Chairman and Chief Executive Officer,  
The Superior Oil Company

H. B. KECK, JR.,  
Executive Vice-President and  
Chief Operating Officer,  
Maritime Bank of California

†D. E. LEWIS, Q.C.,  
Barrister and Solicitor

G. P. MITCHELL,  
Senior Vice-President Exploration

\*J. E. REID,  
President and Chief Operating Officer,  
The Superior Oil Company

EIVIND WIGSTOL,  
Managing Director,  
Falconbridge Nikkelverk Aktieselskap

\* Member of the Executive Committee

† Member of the Audit Committee

## Officers and Corporate Management

J. E. REID,  
Chairman of the Board

MARSH A. COOPER,  
President and Chief Executive Officer

H. T. BERRY,  
Senior Vice-President Metallurgy and Research

W. G. DAHL,  
Senior Vice-President Marketing

G. P. MITCHELL,  
Senior Vice-President Exploration

I. H. KEITH,  
Vice-President Ferronickel Division

J. D. KRANE,  
Vice-President Corporate Affairs and Secretary

G. T. ROBERTSON,  
Vice-President Personnel

J. L. MATTHEWS, Q.C.,  
General Counsel and Assistant Secretary

H. L. HICKEY,  
Director Public Relations

J. M. DONOVAN,  
Controller

N. H. WITHERELL,  
Treasurer

A. R. PASIEKA,  
Director Mining Engineering and Research

PETER ZAHARUK,  
Director General Engineering

---

P.O. BOX 40, COMMERCE COURT WEST, TORONTO, ONTARIO, CANADA M5L 1B4







## Report of the directors to the shareholders

### Highlights of 1979

Stronger market demand and higher metal prices in 1979 propelled the Company's consolidated revenues and earnings to record levels. In addition, consolidated assets exceeded one billion dollars for the first time in the Company's history.

The recovery in the demand for nickel which began in 1978 became stronger in 1979 and there were periods during the year when demand exceeded supply, due partly to loss of production within the industry. Most of the producers continued to operate throughout 1979 at a rate substantially below capacity and this factor, combined with the improvement in demand, enabled producers and consumers to reduce their inventories to normal operating levels. Whether the accelerated rate of growth in demand experienced in 1979 will be sustained remains a question; however, the current balance between supply and demand is encouraging.

At Sudbury Operations, the Falconbridge and Strathcona Mines operated at full capacity throughout 1979 and the East, Onaping and Lockerby Mines were re-activated during the year. Production was stepped up gradually to about 60 per cent of capacity. This increased activity permitted the hiring of 758 additional employees, including all employees laid off in 1978 who wished to return to the Company. The second roaster-electric furnace line in the smelter at Sudbury Operations, which was being readied for production at year end, commenced operation in January, 1980.

Shipments increased substantially and inventories of nickel in all forms had declined by year end to 27,217,000 pounds from 44,009,000 pounds at the end of 1978.

The Company has been operating under an exemption granted by the Ontario Government to December 31, 1979, from a requirement to process in Canada ores mined from certain of its properties in the Sudbury Basin. During 1979 the Company was notified of an Order-in-Council granting the exemption to December 31, 1989, applicable to a quantity of nickel-copper matte capable of producing annually not more than 100,000,000 pounds of refined nickel. This extension will give the Company more flexibility in planning the development of its Sudbury District mines. The Company is cognizant of the Ontario Government's aim to create employment through the further processing of ores in

Canada and will take this objective into account in its corporate planning.

Energy conservation efforts were intensified within the Falconbridge Group of companies during 1979 and have already resulted in significant cost savings at various operations. An Energy Policy Committee was established to undertake a comprehensive study of energy resources and alternatives, encompassing all properties within the Group.

Falconbridge Dominicana, C. por A. recorded a profit in 1979 compared with a loss in 1978. An increased volume of shipments and a higher net realized price for ferronickel accounted for the improvement in results. The continuing rise in fuel oil prices, however, adversely affected operating costs. A second electric furnace was re-commissioned in the first quarter of the year in order to meet market demand. Total sales of ferronickel to Falconbridge Nickel Mines Limited in 1979 were 54,130,000 pounds of contained nickel compared with 43,562,000 pounds in 1978.

The earnings of Falconbridge Copper Limited in 1979 were substantially higher than in 1978 because of higher metal prices and continued efforts to hold down costs. Production of copper, silver and gold decreased slightly, while zinc production was higher. In the Lake Dufault Division, preproduction work on the Corbet copper-zinc mine was completed by year end and production commenced in January, 1980. Falconbridge Copper's ore reserves decreased during 1979 by 670,000 tons to 8,565,000 tons at year end.

Consolidated sales revenues and net earnings of Indusmin Limited set new records in 1979. Modernization and expansion programs were carried out at the company's nepheline syenite and Quebec silica operations and at the steel castings foundry of Fahramet Limited, a wholly-owned subsidiary.

Revenue from metal shipments of United Keno Hill Mines Limited more than doubled in 1979 compared with 1978 and earnings increased five-fold due to the higher price of silver. Lower production of silver and lead in 1979 resulted from lower ore grade from open-pit operations. Ore reserves at the property have been increased.

As a result of the public offer made by The Superior Oil Company ("Superior") to purchase all of the capital stock of Canadian Superior Oil Ltd. ("Canadian Superior"), on the basis of 1.145 common shares of Superior and U.S. \$25.00 for each





# FALCONBRIDGE NICKEL MINES LIMITED

common share of Canadian Superior, the Company transferred its investment of 294,143 common shares of Canadian Superior to Superior on January 29, 1980, in exchange for 336,793 common shares of Superior and Cdn. \$8,534,000. A gain of approximately \$37,700,000, after estimated taxes, will be recorded in the 1980 accounts of the Company from this transaction.

## Consolidated Earnings

Consolidated earnings for the year 1979 amounted to \$130,561,000 or \$25.03 per convertible share (after providing for preference share dividends of \$5,911,000). Included was an extraordinary credit of \$20,000,000 or \$4.02 per convertible share for deferred income taxes arising from prior years' losses. The record level of earnings in 1979 generally reflects a substantial increase in the average net selling prices for metals, a higher nickel and copper sales volume and the weaker Canadian dollar relative to the United States dollar.

The improvement of \$124,743,000 over 1978 consolidated earnings of \$5,818,000 resulted from an increase of \$58,484,000 in the contribution by the Integrated Nickel Operations, an increase of \$42,376,000 from other controlled companies, a decrease of \$3,883,000 in unallocated corporate expenditures, and the extraordinary credit of \$20,000,000 for deferred income taxes.

The Integrated Nickel Operations contributed earnings of \$65,042,000

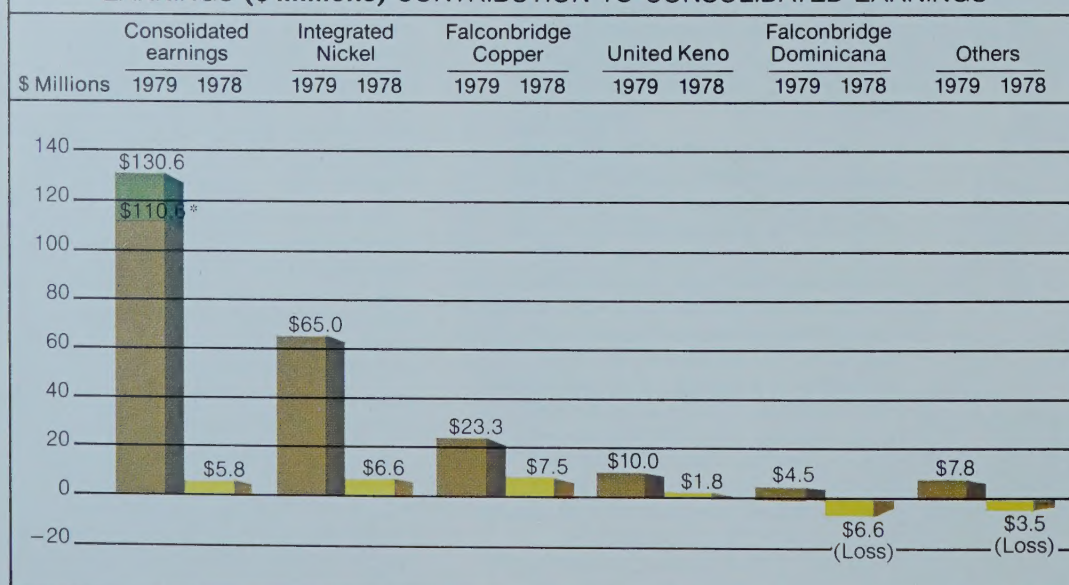
in 1979 compared with \$6,558,000 in the previous year. The improvement of \$58,484,000 mainly reflects higher metal selling prices, increased profits from the treatment and sale of custom materials, and increases of 18 per cent and 41 per cent, respectively, in the quantities of nickel and copper sold.

In 1979 other controlled companies contributed a total of \$48,801,000 to consolidated earnings compared with \$6,425,000 in 1978. This increase of \$42,376,000 reflects increased contributions from all of the operating companies. The 1979 contribution from Falconbridge Copper Limited was \$23,277,000, an increase of \$15,779,000 over that of the previous year. Falconbridge Dominicana, C. por A. contributed \$4,508,000 compared with a loss of \$6,596,000 in 1978. United Keno Hill Mines Limited contributed \$10,035,000, up \$8,210,000 from 1978. Indusmin Limited contributed \$2,714,000, Oamites Mining Company (Proprietary) Limited contributed \$1,360,000 and Wesfrob Mines Limited contributed \$4,597,000, representing increases of \$687,000, \$955,000 and \$4,046,000, respectively, in 1979.

Greater income from higher cash deposits and increased interest rates, together with interest income from the Company's investment in Western Platinum Limited and higher commissions from agency sales, combined to reduce unallocated corporate expenditures from \$7,165,000 in 1978 to \$3,282,000.

Further details of the financial results

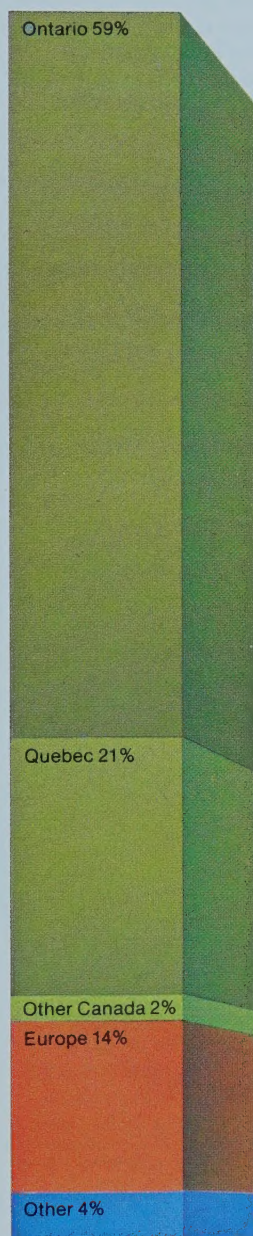
## EARNINGS (\$ Millions) CONTRIBUTION TO CONSOLIDATED EARNINGS



\*Before \$20.0 million extraordinary item

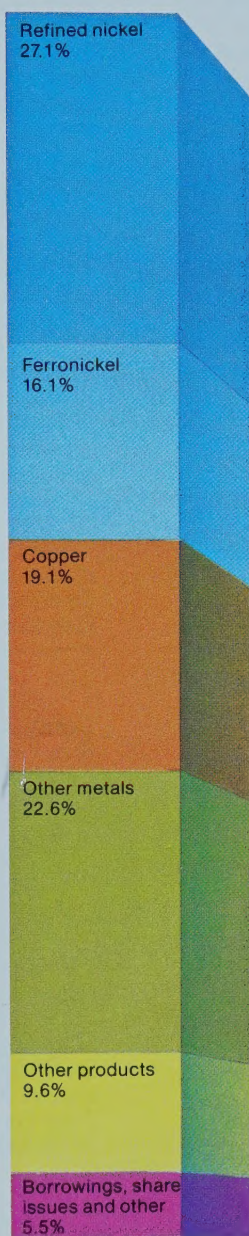


**CONSOLIDATED  
CAPITAL  
EXPENDITURES  
BY GEOGRAPHICAL  
AREA IN 1979**

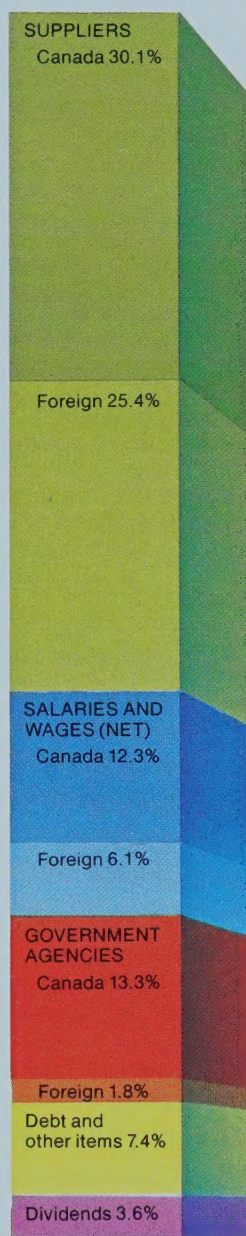


**CONSOLIDATED SOURCES AND APPLICATIONS OF  
WORKING CAPITAL (FUNDS) IN 1979**

**SOURCES OF  
FUNDS**



**APPLICATIONS OF  
FUNDS**



The total funds applied in 1979, before inventory and working capital adjustments, approximated \$705,000,000 of which \$391,000,000, 56 per cent, went to suppliers for operating supplies and fixed assets; and \$129,000,000, 18 per cent, represented take-home pay for employees. Taxes of various kinds to all levels of governments amounted to \$107,000,000, 15 per cent of total funds applied. Dividends paid to shareholders amounted to \$25,000,000, or 4 per cent of funds applied. While approximately 68 per cent of sales revenues were earned overseas, only 38 per cent of all funds utilized went to non-Canadian sources.

The increased funds from product sales in 1979 reflected higher metal selling prices, a greater volume of base metal sales and a weaker Canadian dollar relative to the United States dollar. The increased application of funds generally reflected higher electrolytic nickel and ferronickel production activity in 1979, compared with the lower 1978 levels, a higher capital expenditure program and increased expenditures on exploration projects. The costs of labour and supplies, particularly fuel oil, were higher in 1979.

**CONSOLIDATED CAPITAL EXPENDITURES  
BY GEOGRAPHICAL AREA**

	1979		1978	
	\$millions	%	\$millions	%
Ontario	\$34.2	59%	\$27.7	64%
Canada total	\$47.8	82%	\$34.5	80%
Foreign	10.6	18	8.5	20
World total	\$58.4	100%	\$43.0	100%

**CONSOLIDATED SOURCES AND APPLICATIONS  
OF WORKING CAPITAL (FUNDS)**

	1979		1978	
	\$millions	%	\$millions	%
<b>Sources of funds:</b>				
Product sales—				
Refined nickel	\$226.7	27.1%	\$158.6	29.9%
Ferronickel	134.1	16.1	90.8	17.1
Nickel, all forms	360.8	43.2	249.4	47.0
Copper	159.4	19.1	102.2	19.3
Other metals (Zinc, cobalt and precious metals)	188.7	22.6	103.8	19.6
Other products	80.5	9.6	52.8	10.0
Total product sales	789.4	94.5	508.2	95.9
Borrowings and share issues	4.0	0.5	8.2	1.5
Other	41.8	5.0	13.7	2.6
Total	835.2	100.0%	530.1	100.0%
<b>Applications of funds:</b>				
Suppliers—				
Canada	212.0	30.1%	175.3	36.5%
Foreign	179.2	25.4	82.6	17.2
Total	391.2	55.5	257.9	53.7
Salaries and wages (net)—				
Canada	86.5	12.3	78.0	16.2
Foreign	43.0	6.1	30.0	6.3
Total	129.5	18.4	108.0	22.5
Government agencies—				
Canada	94.3	13.3	56.0	11.6
Foreign	12.6	1.8	10.5	2.2
Total	106.9	15.1	66.5	13.8
Debt and other items	52.4	7.4	41.4	8.6
Dividends to shareholders	25.3	3.6	6.5	1.4
Total	705.3	100.0%	480.3	100.0%
Net total	129.9		49.8	
Adjustment—				
Reduction of prior years' metals inventory accumulations	3.8		50.6	
Working capital increase (decrease)	\$126.1		\$ (0.8)	





of individual operations and companies are presented in Statement 4 on page 28 and in the Summary of 1979 Consolidated Results by Quarters on page 32. Pages 37 to 48 include financial data and commentary on certain of the major subsidiary and associated companies.

## Working Capital

Consolidated working capital increased by \$126,099,000 during 1979 to \$380,883,000 at December 31. Operations contributed \$208,326,000 and other sources contributed \$9,049,000. These contributions were partially offset by expenditures on property, plant, equipment, development and preproduction of \$58,352,000, dividend payments on the convertible shares of \$14,938,000, dividend payments on the preference shares of \$5,911,000, the reduction of long-term debt by \$7,650,000 and other items of \$4,425,000, consisting mainly of dividends to the minority shareholders of subsidiary companies.

## Return on Net Assets

Due to the improvement in the price of metals and the volume of sales in 1979, the return on consolidated assets less current liabilities increased from 1.7 per cent in 1978 to 16.3 per cent in 1979. This improved return on net assets helps compensate for the low return on investment in recent years.

## Marketing Summary

Sales of Falconbridge nickel in all forms during 1979, including nickel refined and delivered on a commission basis, were 137,277,000 pounds compared with 118,361,000 pounds in 1978. This significant increase in shipments was the result of improvements in all major market sectors and some re-stocking of consumer inventories early in the year.

Higher producer prices for nickel in all forms were instituted during 1979. The average selling price per pound by the Company for refined nickel in 1979 was U.S. \$2.31 compared with U.S. \$1.94 in 1978. The average selling price per pound for ferronickel was U.S. \$2.41 in 1979 compared with U.S. \$1.82 in 1978.

The London Metal Exchange wirebar cash price for copper in 1979 averaged U.S. 90 cents per pound, up sharply from U.S. 62 cents per pound in 1978. Copper prices rose sharply in January and remained firm throughout the year, reflecting increased consumption and steadily declining refined metal stocks.

The producer price of cobalt rose from U.S. \$20.00 per pound at the beginning of the year to U.S. \$25.00 per pound by February, 1979 and remained at that level until year end. During 1978 the producer price of cobalt rose from U.S. \$6.40 per pound at the beginning of the year to U.S. \$20.00 per pound at year end. An increase in cobalt supply in 1979 together with a levelling of consumer demand has led to the current softening of the cobalt market.

Sales by the Company of metal products from the Integrated Nickel Operations and from the Ferronickel Operations were as follows:

	1979	1978
	(pounds)	
Refined nickel		
in all forms	89,649,000*	74,884,000*
Ferronickel	47,628,000	43,477,000
Copper	44,733,000*	32,076,000*
Cobalt	1,502,000*	1,255,000*

\* Includes metal refined and sold as agent for the owner.

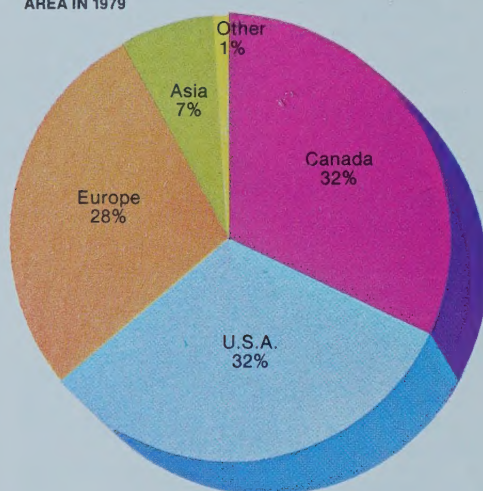
Sales of copper concentrates by subsidiary companies in 1979 contained 104,459,000 pounds of copper, 4 per cent lower than the 108,571,000 pounds sold in 1978. Sales of zinc contained in concentrate totalled 91,710,000 pounds in 1979, 7 per cent higher than the 1978 sales of 85,337,000 pounds.

## Exploration

Consolidated exploration expenditures of Falconbridge and its subsidiary companies were \$14,297,000, an increase of \$6,635,000 over the 1978 level. Expenditures by Falconbridge Nickel Mines Limited and its wholly-owned subsidiaries during 1979 were \$10,396,000, an increase of \$5,025,000 over those of the previous year.

The re-opening of three mines in Sudbury which were closed in the 1975-78 period provides the opportunity for increased exploration for new orebodies. During 1979, exploration

CONSOLIDATED  
SALES REVENUES  
BY GEOGRAPHICAL  
AREA IN 1979



CONSOLIDATED SALES REVENUES  
BY GEOGRAPHICAL AREA

	1979		1978	
	\$ millions	%	\$ millions	%
U.S.A.	\$249.1	32%	\$166.4	33%
Europe	222.7	28	194.6	38
Others	67.3	8	54.1	11
Total foreign	539.1	68	415.1	82
Canada	250.3	32	93.1	18
World total	\$789.4	100%	\$508.2	100%



expenditures for new orebodies in the Sudbury area totalled \$2,214,000, an increase of \$1,224,000 over those of 1978. To maintain a strong ore position in the Sudbury Basin, a substantial increase in exploration activity is planned for 1980.

Regional exploration programs in Canada are directed from Company offices in Vancouver, Winnipeg, Sudbury, Timmins, Quebec City and St. John's. Falconbridge is also engaged in several exploration projects on a joint-venture basis with associated and other companies.

In the Yukon Territory, exploration work is undertaken through a joint venture managed by United Keno Hill Mines Limited.

In recent years, the Company has undertaken geological and geochemical research into parameters relating to the distribution of gold in major North American ore deposits. As a result of this work, a number of properties have been acquired for detailed exploration.

In southern Africa, the Company's principal efforts have again been focused in the Republic of Botswana where Falconbridge manages and holds a 50 per cent interest in major joint-venture exploration projects. One of these projects has been successful in locating a number of kimberlite pipes on Grants held under Special Prospecting Licences. Kimberlite pipes are the primary source of diamonds and evaluation procedures are in progress to determine whether any of the pipes contain diamonds in economic quantities. In eastern Botswana, a number of interesting base metal deposits are being investigated by underground and surface prospecting methods. Evaluation of these prospects will be continued during 1980.

Falconbridge is maintaining its position as a minority partner in a natural resource group engaged in the assessment of a major porphyry copper prospect in Chile. Drilling during the past two years has outlined a significant tonnage of enriched and primary copper mineralization. Underground workings are being driven in the enriched zone to provide a bulk sample for pilot plant metallurgical tests and to help in the evaluation of the orebody.

The Company's nickel laterite exploration program in Zambales

Province, Republic of the Philippines, was continued on a reduced scale during 1979. This program has been undertaken under agreements with Global Mining Resources Inc., Global Marine Inc., and Benguet Consolidated Inc.

## Metallurgical Research and Development

Expenditures on research and development in 1979 were \$3,960,000 compared with \$3,086,000 in 1978. Metallurgical process work was directed mainly toward improving operations at Sudbury and at the Norwegian Refinery. Included were projects aimed at increasing the purity of electrolytic nickel and of the ferronickel produced in the Dominican Republic. Research in the field of nickel products resulted in the development of a superior nickel-bearing alloy for high temperature application.

An analytical method for the quantitative determination of diamonds in drill core samples was developed in support of the Company's diamond exploration work.

In support of associated companies' operations, methods were developed for increasing metal recoveries and obtaining marketable by-products.

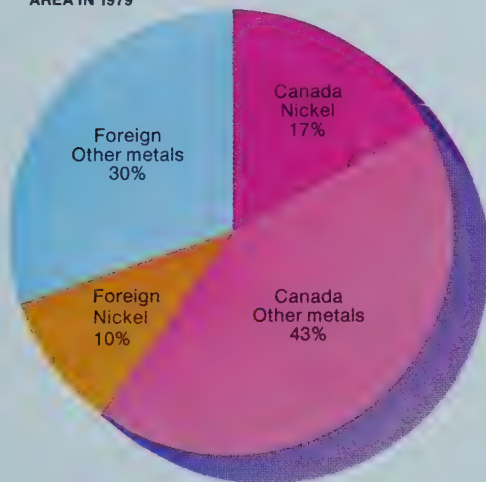
## Environmental Control

Falconbridge recognizes and accepts its responsibility to minimize pollution of the atmosphere, water and soil wherever operations are conducted, and to rehabilitate any areas that are unavoidably transformed environmentally. Currently the following activities are of particular significance in environmental control.

The activation of the second roaster-electric furnace line in the Sudbury smelter early in 1980 has essentially completed the Smelter Environmental Improvement Program. The Sudbury Operations are now well within the current emission levels of the timetable issued by the Ontario Government.

The new tailings disposal and waste water treatment system at Sudbury operated successfully throughout its first full year of use. The area downstream of the treatment plant has been showing rapid improvement. It has been designated as a conservation area

CONSOLIDATED EXPLORATION EXPENDITURES BY GEOGRAPHICAL AREA IN 1979



CONSOLIDATED EXPLORATION EXPENDITURES BY GEOGRAPHICAL AREA

	1979		1978	
	\$ millions	%	\$ millions	%
Canada—Nickel	\$ 2.4	17%	\$1.2	16%
—Other metals	6.1	43	3.9	51
—Total	8.5	60	5.1	67
Foreign—Nickel	1.4	10	0.6	7
—Other metals	4.4	30	2.0	26
—Total	5.8	40	2.6	33
World—Nickel	3.8	27	1.8	23
—Other metals	10.5	73	5.9	77
—Total	\$14.3	100%	\$7.7	100%





because of the large number of water fowl at that location.

United Keno Hill Mines Limited has made a major improvement in effluent water quality by constructing a third control dam.

The Sturgeon Lake Division of Falconbridge Copper Limited has developed detailed plans for environmental rehabilitation of the plant area, in preparation for the termination of operations.

Falconbridge has represented Giant Yellowknife Mines Limited for several years on the Federal and Provincial Industrial Task Force on "Arsenic from Gold Roasting". As a result of studies by the Task Force, regulations have been proposed that are expected to give adequate protection to the environment and be economically acceptable to industry.

Falconbridge continues its active participation in two other Task Forces concerned with the environment, one related to Smelter Emission and the other to Gold Mine Water. Both Task Forces include representation from Environment Canada and other jurisdictions.

## Shareholders

At December 31, 1979, there were 7,362 shareholders, of whom 5,505 were of Canadian registry holding 4,436,284 convertible shares. This represents 88 per cent of the 5,024,755 convertible shares outstanding after deduction of 45,483 shares held by subsidiaries. At the end of 1978 there were 8,351 shareholders of the outstanding convertible shares, of whom 6,367 were of Canadian registry holding 4,721,029 convertible shares representing 94 per cent ownership. In addition, 3,000,000 preference shares with par value of \$25.00 each were held by one shareholder of Canadian registry.

## Dividends

As a result of the improved cash position of the Company, dividends on the Class A shares and Class B shares, which had not been paid since 1977, were reinstituted by the directors in 1979. Three dividend payments of

\$1.00 each per Class A and Class B share were made on June 29, September 28 and December 28, 1979. In addition, the directors declared dividends on the variable rate preference shares amounting to \$5,911,000 compared with \$4,732,000 in 1978. The increase in dividends on the preference shares was due to the increase in the prime lending rate of Canadian chartered banks.

## Organization

With deep regret the directors record the death on March 13, 1979 of Mr. Nelson M. Davis, Chairman of the Board, N. M. Davis Corporation Limited, and a director of the Company since 1973. As a member of the Executive Committee and as Chairman of the Audit Committee of the Board of Directors, Mr. Davis made an extremely valuable contribution to the affairs of the Company.

Mr. D. E. Lewis, Q.C., Barrister and Solicitor, was nominated to replace Mr. Davis and was elected a director at the Shareholders' Meeting on April 11, 1979. Mr. Lewis was subsequently elected Chairman of the Audit Committee.

Mr. John B. Connally, Senior Partner in the law firm of Vinson & Elkins and a director of the Company since 1973, resigned as a director on May 7, 1979 to seek political office in the United States. Mr. Connally served the Company with distinction during his years as a director and his counsel was sincerely appreciated by his colleagues on the Board.

On September 10, 1979 Mr. E. L. Healy, President and Chief Executive Officer, Mine-Met Consultants of Canada Limited, resigned as a director. Mr. Healy, a member of the Board since 1967, rendered valuable service as a director and as an officer of the Company for many years.

Mr. B. R. Dorsey resigned as a director on January 10, 1980. His contribution to the Company's affairs since joining the Board in 1978 has been greatly appreciated by his colleagues.

To fill the vacancies created by the resignations of Messrs. Connally, Healy and Dorsey, the directors elected Messrs. H. T. Berry and Eivind Wigstol as directors of the Company at a meeting



of the Board on September 10, 1979, and Mr. H. R. Hirsch as a director at the meeting of the Board on February 27, 1980. Mr. Berry is Senior Vice-President Metallurgy and Research of the Company and Mr. Wigstol is Managing Director of Falconbridge Nikkelverk A/S, a subsidiary company which operates the refinery in Norway. Mr. Hirsch is Senior Vice President of The Superior Oil Company.

At the September, 1979 meeting the directors approved changes in the titles of four senior officers of the Company: President and Managing Director was re-designated President and Chief Executive Officer; Mr. W. G. Dahl, formerly Group Vice-President, became Senior Vice-President Marketing; Mr. G. P. Mitchell, formerly Group Vice-President, became Senior Vice-President Exploration; and Mr. H. T. Berry, formerly Vice-President Metallurgy and Research, became Senior Vice-President Metallurgy and Research.

### Personnel

In 1978 the Company announced the initiation of a major program to strengthen its base in human resources and to develop management potential for the future. During 1979 the performance appraisal portion of this program was launched as part of an ongoing program of personnel development.

Several collective agreements were negotiated throughout the year. Included were two settlements reached

in Sudbury: a three-year agreement with the Sudbury Mine, Mill and Smelter Workers' Union, Local 598, on behalf of production and maintenance employees, and a three-year agreement with the Office, Clerical and Technical Employees' Union on behalf of unionized office staff.

During the year increased activities within the Falconbridge organization provided 1,561 additional jobs. At the end of 1979 the Falconbridge Group of companies had a total of 14,196 employees, compared with 12,635 in the previous year.

### Appreciation

The directors of the Company express their gratitude to management and employees at all locations for the outstanding results achieved in 1979. The continuing support of shareholders, customers, contractors and suppliers is also gratefully acknowledged.

On behalf of the Board of Directors:



MARSH A. COOPER,  
President and  
Chief Executive Officer.

Toronto, Ontario.  
February 27, 1980.













**CONSOLIDATED  
FINANCIAL  
STATEMENTS**



# FALCONBRIDGE NICKEL MINES LIMITED

## ACCOUNTING RESPONSIBILITIES, PROCEDURES AND POLICIES

The Board of Directors which, among other things, is responsible for the consolidated financial statements of the Company, delegates to management the responsibility for the preparation of the statements. Responsibility for their detailed review is delegated by the Board to the Company's audit committee, which reports its findings to the Board. Each year the shareholders appoint independent auditors to examine and report directly to them on the financial statements.

In preparing the financial statements great care is taken to use the appropriate generally accepted accounting principles and estimates considered by management to present fairly and consistently the consolidated financial position and the results of operations. The significant accounting policies followed by Falconbridge are summarized on pages 16 and 17.

The accounting systems employed by Falconbridge include appropriate controls, checks and balances to provide reasonable assurance that Falconbridge's assets are safeguarded from loss or unauthorized use as well as facilitating the preparation of comprehensive, timely and accurate financial information. The internal auditors, who are employed by the Company as part of management, play an integral part in the effective operation of the system. There are limits inherent in all systems of internal accounting control based on the recognition that the cost of such systems should not exceed the benefits to be derived. Falconbridge believes its system provides the appropriate balance in this respect.

The Company's audit committee is appointed by the Board of Directors annually and is comprised of three non-management directors. The committee meets with management and with the independent auditors (who have free access to the audit committee) to satisfy itself that each group is properly discharging its responsibilities and to review the financial statements and the independent auditors' report. The audit committee reports its findings to the Board of Directors for their consideration in approving the financial statements for issuance to the shareholders.



D. E. Lewis, Q.C.  
Chairman of the  
Audit Committee



M. A. Cooper  
President and Chief  
Executive Officer



J. D. Krane  
Vice-President  
Corporate Affairs  
and Secretary



Chartered Accountants

P.O. Box 251  
Toronto-Dominion Centre  
Toronto, Canada M5K 1J7  
(416) 864-1234

### AUDITORS' REPORT

To the Shareholders of  
Falconbridge Nickel Mines Limited:

We have examined the consolidated balance sheet of Falconbridge Nickel Mines Limited as at December 31, 1979 and the consolidated statements of earnings, retained earnings and changes in financial position for the year then ended. We have also examined the statement of supplementary information as at December 31, 1979 and the statement of investment in associated and other companies as at December 31, 1979 and for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at December 31, 1979 and the results of its operations and the changes in its financial position for the year then ended, and the statement of supplementary information and the statement of investment in associated and other companies present fairly the information set forth therein, all in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year after giving retroactive effect to the change in accounting for investments described in note 2(a).

Toronto, Canada,  
February 7, 1980



Chartered Accountants



# FALCONBRIDGE NICKEL MINES LIMITED

## ACCOUNTING POLICIES

The financial statements of Falconbridge Nickel Mines Limited and its subsidiaries have been prepared by management in accordance with accounting principles generally accepted in Canada, consistently applied. In these statements, references to the Company include only Falconbridge Nickel Mines Limited, the parent company, and references to Falconbridge include the Company, its consolidated subsidiaries and associated companies. The principal accounting policies followed by Falconbridge are summarized hereunder to facilitate review of the consolidated financial statements.

### A. Basis of consolidation and accounting standards

Investments in subsidiary companies (owned more than 50%) and significantly influenced companies are accounted for as follows:

- (i) Falconbridge generally consolidates the financial statements of subsidiary companies and accounts on an equity basis for those companies over which it exercises significant influence (see note 2(a), page 22). Those companies incorporated in foreign countries in which there are significant restrictions on the transfer of funds are accounted for on a cost basis;
- (ii) The differences between the interest in the book value of the net assets of certain consolidated subsidiaries and the carrying value of the investments are allocated to the subsidiary's asset accounts based on their fair values at the date of acquisition. For consolidated operating subsidiaries, the differences are depreciated, depleted or amortized in accordance with Falconbridge's accounting policy for the related asset; and
- (iii) For consolidation purposes foreign subsidiaries' foreign currency financial statements are restated to accord with Falconbridge's accounting policies.

### B. Translation of foreign currencies

Foreign currency transactions and account balances have been translated into Canadian dollars as follows:

- (i) Current assets and current liabilities are translated into Canadian dollars at approximate quoted rates of exchange at year-end;
- (ii) Items included in property, plant and equipment, other assets, and non-current liabilities are translated into Canadian dollars at rates of exchange prevailing when they were acquired or incurred;
- (iii) Revenues and expenses are translated into Canadian dollars at the approximate average monthly quoted rates of exchange, except that provisions for depreciation, depletion and amortization are translated at the rates used to translate the related assets;
- (iv) Realized foreign exchange gains and losses are included in earnings; and
- (v) On translation of foreign subsidiaries' financial statements for consolidation purposes, net unrealized gains are deferred and losses are reflected in earnings.

### C. Revenue recognition

Revenues from the sale of refined metals, ferronickel, industrial minerals and metal castings are recorded in the accounts when legal title passes to the buyer.

Where metals contained in concentrate are sold under contracts, estimated revenues are recorded in the accounts during the month when the concentrates are produced. The estimated revenues may be subject to adjustment on final settlement or may be adjusted prior to final settlement, usually three or four months after the date of production, to reflect changes in metal market prices and weights and assays.

### D. Valuation of inventories

Inventories are valued as follows:

- (i) Metals inventories are valued at the lower of cost and net realizable value. Cost includes direct labour and material costs as well as administrative expenses at the operating properties but excludes development, preproduction and depreciation write-offs.  
The cost of inventories derived from the Company's ore is determined monthly on a "last-in, first-out" basis, the cost of inventories derived from the subsidiaries' ore and other sources is determined on a "first-in, first-out" basis; and
- (ii) Supplies inventories are valued at the lower of average cost of acquisition and replacement cost.

### E. Property, plant and equipment

Property, plant and equipment and related expenditures are accounted for as follows:

- (i) All property, plant and equipment and related deferred development and preproduction expenditures are recorded at cost and include, where appropriate, the fair value adjustments referred to in policy (A) (ii) above;
- (ii) The Company calculates depreciation on a straight-line basis at rates designed to amortize plant and equipment over the lesser of their useful lives or the lives of the producing mines to which they relate, limited to a maximum of twenty-five years. Generally the subsidiary companies calculate depreciation on a straight-line basis at rates varying from 5% to 25%. Depreciation is provided on the unit of production basis by Wesrob Mines Limited and by Falconbridge Copper Limited for certain of its properties;
- (iii) Idle plant and equipment resulting from the temporary curtailment of operations continue to be depreciated. Care and maintenance costs during the standby period are expensed as incurred;
- (iv) Idle plant and equipment resulting from the termination of operations are carried at estimated salvage value. Upon sale or abandonment, the cost of the fixed assets and the related accumulated depreciation are removed from the accounts and any gains or losses thereon are taken into earnings;
- (v) Depletion of properties is provided over a period equal to the lesser of the estimated life of the resources recoverable from the properties, or twenty-five years;
- (vi) Development and preproduction expenditures are deferred until the commencement of commercial production. These, together with certain subsequent development expenditures which are also deferred, are written off at rates designed to amortize the expenditures over periods not longer than the lives of the producing mines or properties; and
- (vii) Repairs and maintenance expenditures are charged to operations or development and preproduction; major betterments and replacements are capitalized.

### F. Exploration

Exploration costs incurred to the date of establishing that a property has reserves which have the potential of being economically recoverable are charged against earnings; further costs are generally capitalized and then amortized as appropriate under policy E above.



**G. Research and process development**

Research and process development costs are charged against earnings as incurred.

**H. Retirement plans**

The costs of retirement plans are charged against earnings in the year premiums or required fundings are payable and include amounts for current service and amortization of past service costs. Past service costs are generally being amortized and funded over periods of up to fifteen years.

**I. Income and mining taxes**

All companies follow the deferral method of applying the tax allocation basis of accounting for income and mining taxes. Under this method timing differences between the period when income or expenses are reported for tax purposes and the period when they are recorded in the accounts result in provisions for deferred taxes.

Where appropriate, income taxes and withholding taxes are provided on the portion of any interest in consolidated foreign subsidiaries' undistributed net income since acquisition which it is reasonable to assume will be transferred in a taxable distribution.

**J. Stock option plan**

The cost to the Company of shares optioned under the plan is allocated over a period of four years from the date options are granted, according to the terms of the plan, and is measured as the amount by which the quoted market value of the Company's shares covered by the grant exceeds the option price specified under the plan throughout the period that options remain outstanding.

Stock option plan costs expensed are included in the accounts payable and accrued charges classification of the consolidated balance sheet until the options are exercised (see note 10, page 26).

**K. Earnings per convertible share**

Earnings per convertible share are computed using the weighted average number of shares outstanding (excluding shares held by subsidiary companies).

The preference shareholder's prior claim is deducted from earnings for purposes of this calculation.

# FALCONBRIDGE NICKEL MINES LIMITED

(Incorporated under the laws of Ontario)

## CONSOLIDATED BALANCE SHEET — DECEMBER 31, 1979

(With comparative figures for 1978)



### ASSETS

	1979 (000's)	1978 (000's) (restated) (note 2)
<b>CURRENT:</b>		
Cash and temporary investments, at cost which approximates market value (note 9, page 24) .....	\$ 259,353	\$ 103,526
Accounts and metals settlements receivable (note 12, page 26) .....	155,980	130,679
Inventories of metals (note 7, page 23) .....	80,664	84,481
Inventories of supplies .....	40,369	33,549
	<u>536,366</u>	<u>352,235</u>
 <b>PROPERTY, PLANT AND EQUIPMENT</b> (note 8, page 23):		
Producing assets —		
Plant and equipment, at cost .....	626,579	598,055
Land and properties, at cost .....	24,248	23,455
	<u>650,827</u>	<u>621,510</u>
Less accumulated depreciation and depletion .....	373,940	345,301
	<u>276,887</u>	<u>276,209</u>
Development and preproduction expenditures, at cost less amounts written off .....	87,749	91,392
	<u>364,636</u>	<u>367,601</u>
Non-producing assets —		
Properties and projects, at cost less amounts written off .....	105,743	88,913
	<u>470,379</u>	<u>456,514</u>
 <b>OTHER:</b>		
Investment in associated and other companies (Statement 5, page 31) .....	57,337	53,892
Deposits, long-term accounts receivable and other assets, at cost .....	2,533	2,722
Debt discount and issue expenses, at cost less amounts written off .....	2,756	3,162
	<u>62,626</u>	<u>59,776</u>
	 <u><u>\$ 1,069,371</u></u>	 <u><u>\$ 868,525</u></u>

(See notes to consolidated financial statements)



## LIABILITIES AND SHAREHOLDERS' EQUITY

	1979 (000's)	1978 (000's) (restated) (note 2)
<b>CURRENT:</b>		
Bank indebtedness . . . . .	\$ 4,185	\$ 4,080
Accounts payable and accrued charges . . . . .	72,770	56,926
Salaries and wages payable . . . . .	17,976	11,680
Income and other taxes payable . . . . .	46,130	18,927
Long-term debt maturing within one year . . . . .	14,422	5,838
	<u>155,483</u>	<u>97,451</u>
 <b>LONG-TERM DEBT</b> (note 9, page 24):		
Falconbridge Nickel Mines Limited . . . . .	171,994	173,244
Falconbridge Dominicana, C. por A. . . . .	108,394	118,554
Other companies . . . . .	6,782	3,205
	<u>287,170</u>	<u>295,003</u>
<b>DEFERRED INCOME AND MINING TAXES</b> (note 6, page 22) . . . . .	41,973	23,687
<b>MINORITY INTEREST</b> . . . . .	88,824	66,183
<b>SHAREHOLDERS' EQUITY:</b>		
Capital (note 10, page 26) —		
Authorized:		
3,000,000 Preference shares of the par value of \$25 each		
7,001,000 Convertible shares without par value		
1,000 Common shares without par value		
Issued:		
3,000,000 Preference shares . . . . .	75,000	75,000
5,024,755 Convertible shares in 1979 (5,024,455 shares in 1978) . . . . .	89,368	89,360
	<u>164,368</u>	<u>164,360</u>
Retained earnings (notes 9, 10 and 11, pages 24 and 26) . . . . .	334,732	225,020
	<u>499,100</u>	<u>389,380</u>
Less 45,483 convertible shares held by subsidiary companies, at cost . . . . .	(3,179)	(3,179)
	<u>495,921</u>	<u>386,201</u>
 On behalf of the Board:		
 		
Director		
 		
Director		
	<u>\$ 1,069,371</u>	<u>\$ 868,525</u>

**CONSOLIDATED STATEMENTS OF EARNINGS AND RETAINED EARNINGS****FOR THE YEAR ENDED DECEMBER 31, 1979***(With comparative figures for 1978)***CONSOLIDATED STATEMENT OF EARNINGS***(See additional details — Statement 4, page 28)*

	1979 (000's)	1978 (000's) (restated) (note 2)
<b>Revenues</b> .....	<b>\$ 789,418</b>	<b>\$ 508,211</b>
<b>Operating expenses:</b>		
Costs of metal and other product sales .....	<b>469,083</b>	379,995
Selling, general and administrative expenses .....	<b>34,136</b>	29,932
Development and preproduction expenditures written off .....	<b>11,019</b>	11,731
Depreciation and depletion .....	<b>31,613</b>	29,182
	<b>545,851</b>	450,840
<b>Operating profit</b> .....	<b>243,567</b>	57,371
Interest and amortization of debt expenses (net of interest and other income of \$21,815,000 in 1979 and \$8,183,000 in 1978) .....	<b>14,274</b>	25,507
Expenditures on exploration .....	<b>14,297</b>	7,662
Expenditures on research and process development .....	<b>3,960</b>	3,086
	<b>32,531</b>	36,255
	<b>211,036</b>	21,116
Income from investment in associated and other companies (Statement 5, page 31) .....	<b>17,589</b>	4,751
<b>Earnings before taxes and other items</b> .....	<b>228,625</b>	25,867
Income and mining taxes (note 6, page 22):		
Current .....	<b>54,100</b>	19,087
Deferred .....	<b>36,898</b>	(6,466)
	<b>90,998</b>	12,621
<b>Earnings before minority interest and extraordinary item</b> .....	<b>137,627</b>	13,246
Minority shareholders' interest in earnings of subsidiary companies .....	<b>27,066</b>	7,428
<b>Earnings for the year before extraordinary item</b> .....	<b>110,561</b>	5,818
Extraordinary item (note 3, page 22) .....	<b>20,000</b>	
<b>Earnings for the year</b> .....	<b>130,561</b>	5,818
Dividend requirement on preference shares .....	<b>5,911</b>	4,732
<b>Earnings applicable to convertible shares</b> .....	<b>\$ 124,650</b>	<b>\$ 1,086</b>
Earnings per convertible share:		
Before extraordinary item .....	<b>\$ 21.01</b>	22¢
For the year .....	<b>\$ 25.03</b>	22¢

**CONSOLIDATED STATEMENT OF RETAINED EARNINGS**

Retained earnings, beginning of year:		
As previously reported .....	<b>\$ 223,074</b>	\$ 222,306
Adjustments relating to prior years (note 2, page 22):		
Change in accounting policy .....	<b>(1,350)</b>	(1,553)
Income and mining taxes .....	<b>3,296</b>	3,181
As restated .....	<b>225,020</b>	223,934
<b>Earnings for the year</b> .....	<b>130,561</b>	5,818
	<b>355,581</b>	229,752
Dividends:		
Convertible shares (\$3.00 per share in 1979) .....	<b>(14,938)</b>	
Preference shares (\$1.97 per share in 1979; \$1.577 per share in 1978) .....	<b>(5,911)</b>	(4,732)
<b>Retained earnings, end of year</b> .....	<b>\$ 334,732</b>	<b>\$ 225,020</b>

*(See notes to consolidated financial statements)*



# CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

FOR THE YEAR ENDED DECEMBER 31, 1979

(With comparative figures for 1978)

	1979 (000's)	1978 (000's) (restated) (note 2)
<b>Sources of working capital (funds):</b>		
From operations, being —		
Earnings for the year before extraordinary item . . . . .	\$ 110,561	\$ 5,818
Add (deduct) items entering into the determination of earnings which neither use nor provide funds:		
Depreciation and depletion . . . . .	31,613	29,182
Development and preproduction expenditures written off . . . . .	11,019	11,731
Amortization of debt expenses . . . . .	223	269
Income and mining taxes deferred . . . . .	38,286	(6,466)
Minority shareholders' interest in earnings of subsidiary companies . . . . .	27,066	7,428
Gains on disposal of fixed assets . . . . .	(107)	(1,198)
Gains on disposals and write-off of investments (net) . . . . .	(1,666)	(245)
Interest in earnings of companies accounted for on an equity basis in excess of dividends received . . . . .	(8,669)	(1,191)
Total from operations . . . . .	208,326	45,328
Proceeds from investments (1979 — includes \$4,376,000 reclassified as a current asset) . . . . .	6,890	381
Proceeds from disposal of fixed assets . . . . .	1,962	1,859
Issue of convertible shares, stock options exercised . . . . .	8	360
Decrease (increase) in other non-current assets . . . . .	189	(204)
Reclassification of long-term debt maturing within one year (note 9, page 24) . . . . .		7,828
	<u>217,375</u>	<u>55,552</u>
<b>Applications of working capital:</b>		
Property, plant and equipment expenditures . . . . .	34,072	29,197
Development and preproduction expenditures . . . . .	24,280	13,767
Changes in minority interest, including dividends paid by consolidated subsidiary companies of \$4,471,000 in 1979 (\$1,750,000 in 1978) . . . . .	4,425	4,756
Decrease in long-term debt (net) . . . . .	7,650	3,908
Dividend payments on the preference shares . . . . .	5,911	4,732
Dividend payments on the convertible shares . . . . .	14,938	
	<u>91,276</u>	<u>56,360</u>
<b>Increase (decrease) in working capital during the year . . . . .</b>	<u>\$ 126,099</u>	<u>\$ (808)</u>
<b>Changes in components of working capital:</b>		
Increase (decrease) in current assets —		
Cash and temporary investments . . . . .	\$ 155,827	\$ (17,761)
Accounts and metal settlements receivable . . . . .	25,301	44,717
Inventories . . . . .	3,003	(50,281)
	<u>184,131</u>	<u>(23,325)</u>
Increase (decrease) in current liabilities —		
Bank indebtedness . . . . .	105	(6,621)
Long-term debt maturing within one year . . . . .	8,584	(7,414)
Other current liabilities . . . . .	49,343	(8,482)
	<u>58,032</u>	<u>(22,517)</u>
<b>Increase (decrease) in working capital during the year . . . . .</b>	<u>126,099</u>	<u>(808)</u>
Working capital, beginning of year . . . . .	<u>254,784</u>	<u>255,592</u>
Working capital, end of year . . . . .	<u>\$ 380,883</u>	<u>\$ 254,784</u>

(See notes to consolidated financial statements)

# FALCONBRIDGE NICKEL MINES LIMITED

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

DECEMBER 31, 1979

### 1. Accounting policies

The principal accounting policies followed by Falconbridge are summarized on pages 16 and 17.

### 2. Change in accounting policy and prior years' adjustment

#### (a) Change in accounting policy:

To accord with a recent Canadian Institute of Chartered Accountants recommendation, investments in those companies over which Falconbridge has the ability to exercise "significant influence" are now accounted for on the equity basis. Prior to 1979 these investments were accounted for on the cost basis.

#### (b) Prior years' adjustment:

(i) For comparative purposes certain prior years' figures have been restated, from those previously published, to reflect the change in accounting policy detailed in note 2(a) above; and

(ii) Income and mining tax re-assessments were received by the Company relating to 1974 and prior years, including interest.

The consolidated earnings previously reported for 1978 were increased by \$203,000 as a result of the change in accounting policy and increased by \$115,000 as a result of the tax re-assessments.

### 3. Extraordinary item

The extraordinary item of \$20,000,000 reflects the reduction of deferred income taxes resulting from the carry-forward of prior losses (see note 6 below).

### 4. Translation of foreign currencies

(a) If translated into Canadian dollars at the year-end rates of exchange long-term debt would increase by \$27,925,000 to \$315,095,000. This change is not necessarily indicative of the amount repayable when the obligations are retired.

(b) Net realized exchange gains on foreign currency transactions amounting to \$1,151,000 in 1979 (1978 — \$28,000) have been recorded in earnings; net unrealized gains on translation of foreign subsidiaries' financial statements for consolidation purposes, before minority interest, amounting to \$10,582,000 at December 31, 1979 (1978 — \$12,729,000), have been deferred and included in accounts payable and accrued charges.

### 5. Retirement plans

The Company and certain of its subsidiaries maintain retirement plans providing retirement, death and termination benefits for substantially all salaried and hourly rated employees.

Total pension expense for the year was \$8,798,000 (1978 — \$9,741,000) including past service costs of \$3,238,000 (1978 — \$4,584,000). Based on the most recent actuarial evaluation, the unfunded past service costs (including the costs of improvements which went into effect on January 1, 1980) for all pension plans in effect at December 31, 1979 are estimated to amount to approximately \$52,500,000 (1978 — \$32,500,000) including \$36,500,000 (1978 — \$18,000,000) which is computed to have vested. While the companies have no legal liability with regard to the past service costs, including that portion which has vested, the companies' present intention is to discharge such unfunded past service costs over periods of up to fifteen years.

### 6. Income and mining taxes

Losses of \$49,000,000 incurred prior to 1979 were available to reduce the 1979 taxable income. These losses gave rise to a \$20,000,000 deferred tax debit which was not recorded in the accounts at December 31, 1978 (see note 3 above).

For 1979 the difference between the amount of the reported consolidated provision for income and mining taxes and the amount computed by multiplying the earnings before taxes by the Company's applicable tax rates is as follows —

	Canadian taxes		Foreign taxes	Total
	Federal and provincial income taxes	Provincial mining taxes		
	(000's)	(000's)	(000's)	(000's)
Earnings before taxes .....	\$ 198,682	\$ 198,682	\$ 29,943	\$ 228,625
Company's tax rates .....	49%	29%*	49%	
Earnings before taxes multiplied by the Company's tax rates .....	\$ 97,354	\$ 57,618	\$ 14,672	
Taxes reported in accounts .....	55,756	28,711	6,531	\$ 90,998
Decrease to be reconciled .....	\$ (41,598)	\$ (28,907)	\$ (8,141)	
Reconciliation, tax effect of —				
(1) Non-claimable expenses .....	\$ 2,498	\$ 14,339	\$ 1,075	
(2) Resource, depletion, processing and inventory allowances .....	(38,094)	(23,379)	(393)	
(3) Adjustments because of differences in companies' tax rates .....	289	(4,412)	(1,395)	
(4) Non-taxable income .....	(6,291)	(15,455)	(7,428)	
	\$ (41,598)	\$ (28,907)	\$ (8,141)	

\* Average determined from the graduated scale which ranged from 0% to 40% from January 1 to April 10 and from 0% to 30% from April 11 to December 31.



No taxes have been provided by the Company in respect of the earnings of its wholly-owned subsidiary, Falconbridge International Limited (Bermuda), as a result of the Company's present intention not to repatriate, to Canada, its earnings of U.S. \$20,459,000 accumulated to December 31, 1979 (U.S. \$7,169,000 to December 31, 1978).

Falconbridge Dominicana, C. por A. (Falcondo), a subsidiary company, has received income tax assessments from the Dominican Government for the 1972 and 1973 fiscal years approximating Cdn. \$5,600,000. Falcondo is presently appealing these assessments and, based on the opinion of management and counsel, the company has not provided for and believes that there will be no material adjustments required to the consolidated accounts.

## 7. Inventories of metals

Consolidated metals inventories consist of the following:

	1979		1978	
	Metals in process	Finished metals	Metals in process	Finished metals
	(000's)	(000's)	(000's)	(000's)
Derived from:				
Company's ore	\$ 14,460	\$ 15,198	\$ 14,890	\$ 43,410
Subsidiaries	5,593	40,892	4,240	14,021
Other sources	3,535	986	7,039	881
	<u>\$ 23,588</u>	<u>\$ 57,076</u>	<u>\$ 26,169</u>	<u>\$ 58,312</u>
Total inventories of metals	<u>\$ 80,664</u>		<u>\$ 84,481</u>	

Inventories derived from the Company's ore are valued on the "last-in, first-out" basis. If these inventories were valued at current cost the December 31, 1979 inventories of metals value on the consolidated balance sheet would increase by approximately \$31,470,000 (1978 — \$34,982,000).

The inventory of finished nickel in all forms totalled 27,217,000 pounds at December 31, 1979 (1978 — 44,009,000 pounds).

## 8. Property, plant and equipment

(a) The following table reflects the net book value of the consolidated property, plant and equipment on a functional basis (see note 3 of the notes to statement of supplementary information, page 30).

	1979			1978		
	Cost	Accumulated depreciation and depletion	Net book value	Cost	Accumulated depreciation and depletion	Net book value
	(000's)	(000's)	(000's)	(000's)	(000's)	(000's)
<b>Property, plant and equipment:</b>						
Producing assets —						
<b>Plant and equipment:</b>						
Mines, mining plants and ancillary mining assets	\$378,050	\$241,144	\$136,906	\$368,707	\$224,958	\$143,749
Smelter	104,633	27,383	77,250	100,369	23,581	76,788
Refinery	89,999	56,457	33,542	81,016	52,329	28,687
Townsites and other company housing	16,844	10,276	6,568	16,720	9,712	7,008
Transportation assets and facilities	10,150	9,771	379	9,842	9,383	459
Other	26,903	13,039	13,864	21,401	11,829	9,572
	<u>626,579</u>	<u>358,070</u>	<u>268,509</u>	<u>598,055</u>	<u>331,792</u>	<u>266,263</u>
<b>Properties</b>	22,489	15,870	6,619	21,702	13,509	8,193
<b>Land</b>	1,759		1,759	1,753		1,753
	<u>24,248</u>	<u>15,870</u>	<u>8,378</u>	<u>23,455</u>	<u>13,509</u>	<u>9,946</u>
	<u>\$ 650,827</u>	<u>\$373,940</u>	<u>276,887</u>	<u>\$621,510</u>	<u>\$345,301</u>	<u>276,209</u>
Non-producing assets			30,881			30,955
			<u>307,768</u>			<u>307,164</u>
<b>Development and preproduction expenditures:</b>						
Producing assets			87,749			91,392
Non-producing assets			74,862			57,958
			<u>162,611</u>			<u>149,350</u>
			<u>\$470,379</u>			<u>\$456,514</u>

## FALCONBRIDGE NICKEL MINES LIMITED

- (b) As a result of production curtailments in the Integrated Nickel Operations, certain property, plant and equipment and the related preproduction and development expenditures, with a net aggregate carrying value of approximately \$63,000,000 were placed on standby in 1977 and 1978. Most of these assets were phased into production in 1979.
- (c) Non-producing assets do not include the assets placed on a standby basis (referred to in note 8(b) above) but include the following:

Company and project	1979 (000's)	1978 (000's)
Falconbridge Nickel Mines Limited —		
Fraser mine (i) .....	\$ 32,171	\$ 20,896
Other projects (ii) .....	5,577	6,391
Falconbridge Copper Limited —		
Corbet mine (i) .....	24,229	16,437
Other (ii) .....	127	
Falconbridge Nikkelverk Aktieselskap —		
Process revision program (i) .....	672	2,377
New Quebec Raglan Mines Limited —		
Subsidiary's Cape Smith-Wakeham Bay properties (iii) .....	34,031	34,042
Other subsidiary companies' projects (ii) .....	8,936	8,770
	<u>\$ 105,743</u>	<u>\$ 88,913</u>

- (i) In the preproduction stage. Corbet mine commenced commercial production in January, 1980.
- (ii) Includes the costs related to certain projects upon which further work has been suspended pending more favourable economics. The Company believes there is reasonable expectation that these costs will be recovered.
- (iii) Exploration, development and other expenditures relating to New Quebec Raglan Mines Limited (a 68.3% owned subsidiary) and its wholly-owned subsidiary company, Raglan Quebec Mines Limited, incurred in the development of the latter company's Cape Smith-Wakeham Bay properties.

These costs have been deferred with the intention that they should be amortized by charges against income from future mining operations. Development work on the properties was suspended in 1971 and since that time studies have continued on the feasibility of alternate methods of bringing the properties into production. Profits which are commensurate with the risks of operating in such a remote northern location, must be indicated before development to production. The exploration permits and development licences pertaining to these properties expire in 1982 and the Company has no reason to believe that new permits will not be issued.

## 9. Long-term debt

A. Details of long-term debt are as follows:

	1979 (000's)	1978 (000's)
(i) <b>Falconbridge Nickel Mines Limited</b>		
7.75% Sinking fund debentures maturing February, 1991 (a) .....	\$ 45,000	\$ 46,250
8.85% Sinking fund debentures maturing May, 1996 (U.S. \$50,000,000) (b) ..	51,094	51,094
Bank loan due August 31, 1982 (15.25% at December 31, 1979) (c) .....	75,900	75,900
Total (1979 net of \$949,000 maturing within one year) .....	<u>\$ 171,994</u>	<u>\$ 173,244</u>

- (a) The Company is required to make sinking fund payments sufficient to retire \$1,250,000 principal amount of the 7.75% debentures in each of the years 1980 to 1990.
- (b) No portion of the principal is due on the 8.85% debentures until 1981 when the Company is required to commence sinking fund payments sufficient to retire U.S. \$3,000,000 principal amount of debentures in each of the years 1981 to 1995.
- (c) The bank loan is part of a line of credit of \$80,000,000 extended by a Canadian bank. Interest is payable monthly at the rate of  $\frac{1}{4}$  of 1% (reduced from  $\frac{1}{2}$  of 1% effective January 3, 1979) over the bank's minimum commercial lending rate as may be established from time to time during the term of the loan. If in the opinion of the bank there is any material adverse change in the Company's operations or financial position the \$75,900,000 outstanding loan may, at the option of the bank, become immediately due and payable.



(ii) **Falconbridge Dominicana, C. por A. (Falcondo)** (RD\$1 equals U.S.\$1)

(a) Due to Loma Corporation (Loma)\* (Payable in U.S. currency) —

8.73% Series C demand mortgage notes**	RD\$ 68,570	RD\$ 68,570
8.5% Series D demand subordinated notes	34,000	34,000
	<u>102,570</u>	<u>102,570</u>

\* Payment will only be demanded under certain specified circumstances, the most significant being to meet payments due on notes to Loma (a U.S. financing company) issued in the same principal amounts and at the same interest rates as the above demand notes, as follows:

8.73% Series C secured sinking fund notes, due in semi-annual payments of U.S. \$3,810,000 1980 to 1986 inclusive\*\*; and  
8.5% Series D guaranteed sinking fund notes, due in semi-annual payments of U.S. \$3,400,000 1987 to 1991 inclusive.

\*\* In consideration of an increase in the interest rate from 8.5% to 8.73% over the remaining life of the notes Falcondo arranged, late in the first half of 1978, with Loma to defer the 1978 and 1979 semi-annual principal payments aggregating U.S. \$15,240,000. Commencing in 1981, this deferment will become due in twelve semi-annual instalments of U.S. \$1,270,000 in addition to the regularly scheduled principal repayments.

(b) Due to International Bank for Reconstruction and Development —

7% Loans, due semi-annually to 1984, payable in various currencies	17,139	19,953
	<u>119,709</u>	<u>122,523</u>

(c) Housing —

9.5% Mortgages on houses repayable monthly to 1993 in Dominican Republic currency	1,969	2,057
	<u>121,678</u>	<u>124,580</u>
Less long-term debt maturing within one year	<u>11,144</u>	<u>3,413</u>

Total — As reported by Falcondo in Dominican Republic currency, translated at year-end rates of exchange RD\$ 110,534 RD\$ 121,167

Total — Expressed in Canadian currency and reflecting the Company's translation policy (1979 net of \$13,001,000 maturing within one year) \$ 108,394 \$ 118,554

(iii) **Other companies**

Various maturity dates and interest rates.

Total (1979 net of \$472,000 maturing within one year) \$ 6,782 \$ 3,205

(iv) **Maturity and sinking fund requirements**

Maturity and sinking fund requirements (stated at 1979 year-end rates of exchange) for the next five years are as follows:

1980 — \$14,422,000	1983 — \$22,237,000
1981 — \$21,301,000	1984 — \$22,252,000
1982 — \$97,524,000*	

\*Includes Company bank loan repayment of \$75,900,000.

B. Guarantees, covenants and restrictions:

(i) Falconbridge Nickel Mines Limited (the Company) has guaranteed portions of the long-term debt of Falconbridge Dominicana, C. por A. (Falcondo), the details of which are as follows —

(a) All loans are secured by a first mortgage on the assets of Falcondo, which have a net aggregate carrying value of RD\$177,723,000 at December 31, 1979, and by a contract under which the Company has agreed to buy all ferronickel of commercial value produced by Falcondo. The Company is also obligated to provide 60% of the funds required by Falcondo to enable it to meet its operating costs and debt service obligations in the event receipts from the sale of ferronickel produced by Falcondo and other receipts are insufficient for that purpose. The loans from Loma Corporation are covered by a specific risk insurance issued by the Overseas Private Investment Corporation.

(b) The Company has pledged all of its holdings of its shares of Falcondo against repayment of these loans, other than the mortgages on housing and the subordinated portion of U.S. \$34,000,000. In addition, the Company has made a direct guarantee for repayment of 60% of this subordinated portion of the loan.

(c) In accordance with the terms of the loan agreements, funds of \$3,224,000 (1978 — \$2,992,000) (included with cash and temporary investments) are on deposit with the Trustee for use in paying current debt service and operating expenses of Falcondo.

(ii) During the period that the Falcondo loans are outstanding, there are certain restrictions placed on the amount and nature of borrowing that the Company may undertake. Covenants given by the Company in this respect

## FALCONBRIDGE NICKEL MINES LIMITED

are substantially the same (other than the restriction on the payment of dividends) as those given by the Company under its 8.85% debentures which include limitations as to:

- (a) The amount of dividends which may be paid by the Company (see note 9B (iii) below);
- (b) The assumption of additional debt; and
- (c) Guarantees which it may give on certain indebtedness of its subsidiary and other companies.

- (iii) At December 31, 1979, the portion of retained earnings restricted under the 8.85% debenture covenants and not available for dividend payment, share repurchase and preference share redemption was \$95,905,000 (1978 — \$95,779,000).

### 10. Capital

The issued convertible shares are summarized below:

	December 31, 1979	December 31, 1978
Class A shares .....	4,930,837	4,864,496
Class B shares .....	93,918	159,959
	5,024,755	5,024,455
Less Class A shares held by subsidiary companies .....	45,483	45,483
	<u>4,979,272</u>	<u>4,978,972</u>

Class A and Class B shares are inter-convertible at any time and are similar in all respects, including dividend rights. For 1978 and prior years tax deferred dividends on the Class B shares could be paid out of either or both "tax paid undistributed surplus on hand" or "1971 capital surplus on hand" as defined in the Income Tax Act of Canada. An amendment to the Tax Act prohibits payments of such dividends after December 31, 1978.

During 1979, 300 Class A shares were issued for \$25.00 per share under the stock option plan available to employees which expired on December 19, 1978.

In 1979, the Company reserved 200,000 unissued Class A convertible shares without par value for the purpose of granting, to certain employees and directors who are full time employees of the Company or a subsidiary or associated company, options to purchase shares of the Company. The price for which the shares may be optioned shall be the closing bid price for the Class A convertible shares on the business day immediately preceding the granting of the option less a discount of 10%. Options are exercisable, over a period of four years, at the rate of 25% of the shares optioned times the number of periods of twelve months each which have elapsed since the date the option was granted less the aggregate number of options already exercised or surrendered. The optionee may also be given the right, at the time of exercise, to surrender the right to purchase shares under the option in return for payment in cash equal to the excess of the fair market value of the shares over the option price thereof. No options have been granted to date.

The 3,000,000 Variable Rate Cumulative Redeemable Preference Shares, Series "A", which were issued in 1977 to a Canadian bank, have a par value of \$25.00 each and must be redeemed, at their par value, in August 1984 or may be redeemed earlier at the Company's option upon giving 30 days notice. The shares have a cumulative variable dividend rate calculated on a quarterly basis, equal to one-half of the bank's minimum lending rate plus 1.5%; and the dividend rate was 9% at December 31, 1979.

The preference shareholder has the right to appoint two members to the Board of Directors if dividends on the Preference Shares fall eight quarterly payments in arrears. Dividends on the Preference Shares have never been in arrears.

### 11. Interest in investees' undistributed earnings

Consolidated retained earnings includes the Company's share of the undistributed earnings of its (i) consolidated subsidiaries; and (ii) equity accounted for companies, which, respectively, amounted to \$77,188,000 and \$14,208,000 (1978 — \$33,878,000 and \$5,439,000 respectively).

### 12. Commitments and contingent liabilities

- (a) There are commitments outstanding at December 31, 1979 aggregating approximately \$6,700,000 in connection with capital expenditure programs.
- (b) The following are under continuing study and discussion with Ontario Government officials:
  - (i) Construction of Canadian refining facilities;
  - (ii) Exemption, until December 31, 1989 (as extended during 1979), from a requirement to process in Canada ores mined from certain properties of the Company in Ontario, such exemption being limited to the quantity of nickel-copper matte capable of producing not more than 100,000,000 pounds of refined nickel per year; and
  - (iii) The requirement to submit plans, during 1980, to comply with additional environmental controls related to smelter emissions at the Sudbury operations by December 31, 1983.

Pending completion of such discussions, it is not practicable to estimate the potential costs arising from these items.



- (c) During 1979 and 1978 a portion of accounts receivable was either sold without recourse or discounted with recourse. The cost, which was charged against earnings, amounted to \$2,062,000 in 1979 (1978 — \$1,705,000). At December 31, 1979 the Company has a contingent liability of U.S. \$41,001,000 in respect of discounted bills of exchange drawn on its accounts receivable.

**13. Subsequent events**

As a result of the public offer made by The Superior Oil Company, Houston, Texas (Superior), to purchase all of the capital stock of Canadian Superior Oil Ltd. (Canadian Superior), at a price of 1.145 common shares of Superior and U.S. \$25.00 cash for each share of Canadian Superior the Company received, on January 29, 1980, 336,793 shares of Superior (with a quoted market value of \$59,213,000) and Cdn. \$8,534,000 for its 294,143 Canadian Superior shares. A gain of approximately \$37,700,000 (net of estimated taxes of \$12,600,000) will be recorded in the 1980 accounts.

Superior has now acquired 100% of the outstanding shares of Canadian Superior and, at December 31, 1979, is the beneficial owner of 53.1% of the outstanding shares of McIntyre Mines Limited. McIntyre is the largest single shareholder of Falconbridge, owning 36.8% of the outstanding convertible shares as at December 31, 1979.

# FALCONBRIDGE NICKEL MINES LIMITED

## STATEMENT OF SUPPLEMENTARY INFORMATION *(Thousands of dollars)*

December 31, 1979							
% ownership	Integrated Nickel Operations (100%) (note 2)	Unallocated corporate (100%) (note 2)	Falconbridge Copper Limited (50.2%) (note 3)	Falconbridge Dominicana, C. por A. (65.7%) (note 3)	Indusmin Limited (69.0%)	Oamites Mining Company (Proprietary) Limited (74.9%)	Westro Mines Limited (100%)
<b>OPERATIONS</b> (note 3):							
Revenues .....	\$351,802	\$ 3,108	\$204,818	\$160,648	\$ 56,038	\$ 18,495	\$ 21,0
Operating expenses —							
Costs of metal and other product sales .....	208,589		100,665	116,344	38,859	12,222	12,8
Selling, general and administrative expenses .....	17,919	4,130	1,554	7,253	5,887	1,821	1
Development and preproduction expenditures written off .....	5,613		3,973	1,486	30	105	3
Depreciation and depletion .....	13,893	306	5,271	7,050	2,851	1,090	5
	<u>246,014</u>	<u>4,436</u>	<u>111,463</u>	<u>132,133</u>	<u>47,627</u>	<u>15,238</u>	<u>13,8</u>
Operating profit (loss) .....	<u>105,788</u>	<u>(1,328)</u>	<u>93,355</u>	<u>28,515</u>	<u>8,411</u>	<u>3,257</u>	<u>7,2</u>
Interest (net) and amortization of debt expenses .....	1,571	786	(4,201)	13,155	1,011	(12)	
Expenditures on exploration .....	2,390	6,848	3,593	153	92		5
Expenditures on research and process development .....	3,640				354		
	<u>7,601</u>	<u>7,634</u>	<u>(608)</u>	<u>13,308</u>	<u>1,457</u>	<u>(12)</u>	<u>5</u>
Earnings (loss) before investment income and taxes .....	98,187	(8,962)	93,963	15,207	6,954	3,269	6,6
Investment income .....		17,589	86		50		
Earnings (loss) before taxes .....	98,187	8,627	94,049	15,207	7,004	3,269	6,6
Income and mining taxes .....	33,145	294	47,500	5,324	2,871	1,179	1,9
Earnings (loss) for the year before other items	<u>\$ 65,042</u>	<u>\$ 8,333</u>	<u>\$ 46,549</u>	<u>\$ 9,883</u>	<u>\$ 4,133</u>	<u>\$ 2,090</u>	<u>\$ 4,6</u>
Falconbridge's interest in above earnings (loss) after consolidation adjustments (note 3) .....	<u>\$ 65,042</u>	<u>\$ 8,333</u>	<u>\$ 23,277</u>	<u>\$ 4,508</u>	<u>\$ 2,714</u>	<u>\$ 1,360</u>	<u>\$ 4,5</u>
<b>WORKING CAPITAL</b> (note 5):							
Current assets .....	\$334,899		\$128,127	\$ 83,027	\$ 23,717	\$ 8,301	\$ 12,7
Current liabilities .....	106,718		42,933	26,997	12,650	4,841	2,5
	<u>\$228,181</u>		<u>\$ 85,194</u>	<u>\$ 56,030</u>	<u>\$ 11,067</u>	<u>\$ 3,460</u>	<u>\$ 10,1</u>
<b>PROPERTY, PLANT AND EQUIPMENT</b> (notes 3 and 6):							
Producing assets, at net book value —							
Plant and equipment .....	\$153,413		\$ 3,280	\$ 82,400	\$ 21,124	\$ 4,122	\$ 2,8
Land and properties .....	3,789		862	1,891	899	86	
Development and preproduction expenditures .....	52,705		2,520	30,592	403	424	1,1
	<u>\$209,907</u>		<u>\$ 6,662</u>	<u>\$114,883</u>	<u>\$ 22,426</u>	<u>\$ 4,632</u>	<u>\$ 3,9</u>
Non-producing assets, at cost less amounts written off .....	<u>\$ 39,831</u>		<u>\$ 24,356</u>		<u>\$ 632</u>		
PRINCIPAL LOCATION OF ASSETS .....	Ontario and Norway		Quebec and Ontario	Dominican Republic	Ontario, Quebec and U.S.A.	South West Africa	British Columbia
PRINCIPAL PRODUCTS .....	Nickel, copper and cobalt		Copper, zinc and precious metals	Ferronickel	Industrial minerals and metal castings	Copper	Iron and copper
MAJOR MARKETS FOR PRINCIPAL PRODUCTS	Europe, U.S.A. and Japan		Canada and Europe	Europe, U.S.A. and Japan	Canada and U.S.A.	Europe	U.S.A. and Japan
MARKET VALUE OF FALCONBRIDGE'S SHAREHOLDINGS (note 7) .....			<u>\$ 65,097</u>		<u>\$ 12,896</u>		

*(See notes to statement of supplementary information)*



## STATEMENT 4

December 31, 1978

	Consolidated total (after adjustments) (note 3)	Integrated Nickel Operations (100%) (note 2)	Unallocated corporate (100%) (note 2)	Falconbridge Copper Limited (50.2%) (note 3)	Falconbridge Dominicana, C. por A. (65.7%) (note 3)	Indusmin Limited (69.0%)	Oamites Mining Company (Proprietary) Limited (74.9%)	Westfrob Mines Limited (100%)	Other	Consolidated total (restated) (after adjustments) (note 3)
3,807	<b>\$789,418</b>	\$209,915	\$ 2,021	\$132,429	\$ 89,469	\$ 46,686	\$ 13,380	\$ 13,222	\$ 2,095	<b>\$508,211</b>
1,279 600	<b>469,083</b> <b>34,136</b>	162,737 14,231	3,354	87,443 1,050	76,092 6,776	32,665 5,235	10,079 1,313	10,851 63	883 597	<b>379,995</b> <b>29,932</b>
450	<b>11,019</b> <b>31,613</b>	4,282 12,006	540	4,459 3,816	2,844 7,621	30 2,901	99 883	520 898	297	<b>11,731</b> <b>29,182</b>
2,329	<b>545,851</b>	193,256	3,894	96,768	93,333	40,831	12,374	12,332	1,777	<b>450,840</b>
1,478	<b>243,567</b>	16,659	(1,873)	35,661	(3,864)	5,855	1,006	890	318	<b>57,371</b>
(71) 635	<b>14,274</b> <b>14,297</b>	7,061 1,215	3,588 3,515	(1,366) 2,163	13,825 82	815 7	51	347	(30) 333	<b>25,507</b> <b>7,662</b>
	<b>3,960</b>	3,006				132				<b>3,086</b>
564	<b>32,531</b>	11,282	7,103	797	13,907	954	51	347	303	<b>36,255</b>
914 22	<b>211,036</b> <b>17,589</b>	5,377	(8,976) 3,966	34,864	(17,771)	4,901	955	543	15 785	<b>21,116</b> <b>4,751</b>
936 215	<b>228,625</b> <b>90,998</b>	5,377 (1,181)	(5,010) 279	34,864 17,267	(17,771) (6,042)	4,901 1,836	955 336	543 5	800 163	<b>25,867</b> <b>12,621</b>
721	<b>\$137,627</b>	\$ 6,558	\$ (5,289)	\$ 17,597	\$ (11,729)	\$ 3,065	\$ 619	\$ 538	\$ 637	<b>\$ 13,246</b>
730	<b>\$110,561</b>	\$ 6,558	\$ (5,289)	\$ 7,498	\$ (6,596)	\$ 2,027	\$ 405	\$ 551	\$ 664	<b>\$ 5,818</b>
1,838 393	<b>\$536,366</b> <b>155,483</b>	\$236,211 77,386		\$ 65,807 20,282	\$ 56,155 11,577	\$ 17,566 9,299	\$ 4,479 2,410	\$ 6,188 2,360	\$ 1,887 645	<b>\$352,235</b> <b>97,451</b>
1,445	<b>\$380,883</b>	\$158,825		\$ 45,525	\$ 44,578	\$ 8,267	\$ 2,069	\$ 3,828	\$ 1,242	<b>\$254,784</b>
1,276 851	<b>\$268,509</b> <b>8,378</b>	\$146,543 3,753		\$ 5,125 2,796	\$ 89,204 1,943	\$ 17,016 929	\$ 4,438 108	\$ 3,396	\$ 541 417	<b>\$266,263</b> <b>9,946</b>
	<b>87,749</b>	52,124		5,351	31,554	434	509	1,420		<b>91,392</b>
2,127	<b>\$364,636</b>	\$202,420		\$ 13,272	\$122,701	\$ 18,379	\$ 5,055	\$ 4,816	\$ 958	<b>\$367,601</b>
40,924	<b>\$105,743</b>	\$ 31,071		\$ 16,437		\$ 632			\$ 40,773	<b>\$ 88,913</b>
		Ontario and Norway		Quebec and Ontario	Dominican Republic	Ontario, Quebec and U.S.A.	South West Africa	British Columbia		
		Nickel, copper and cobalt		Copper, zinc and precious metals	Ferronickel	Industrial minerals and metal castings	Copper	Iron and copper		
		Europe, U.S.A. and Japan		Canada and Europe	Europe, U.S.A. and Japan	Canada and U.S.A.	Europe	U.S.A and Japan		
58,740	<b>\$136,733</b>			\$ 43,940		\$ 11,284			\$ 15,786	<b>\$ 71,010</b>

# FALCONBRIDGE NICKEL MINES LIMITED

## NOTES TO STATEMENT OF SUPPLEMENTARY INFORMATION

DECEMBER 31, 1979

### 1. Translation of foreign currencies

Foreign currency items have been translated into Canadian dollars as explained in note B of the accounting policies on page 16.

### 2. Integrated Nickel Operations and Unallocated corporate

Included under the caption "Integrated Nickel Operations" are the accounts of the Company and all its wholly-owned subsidiaries engaged in the integrated operations of mining, milling, smelting, refining and marketing of nickel mainly derived from Canadian ore. The Integrated Nickel's production operations are interdependent and are carried on in Canada (mainly mining and reducing ore to matte at Sudbury) and in Norway (matte refining). The Marketing Division is structured to serve worldwide markets. That portion of the Company's net corporate expenditures relating to the overall direction and management of other activities of the Falconbridge group of companies and income from investment in associated and other companies have been segregated under the caption "Unallocated corporate". It is not practicable to segregate certain of the Integrated Nickel Operations and the Company's corporate balance sheet items.

### 3. Consolidation adjustments

Adjustments have been made on consolidation as follows:

#### (a) Fair value adjustments

The difference between the interest in the book value of the net assets of certain consolidated subsidiaries and the carrying value of the investments are accounted for as explained in note A (ii) of the accounting policies on page 16.

The investment in consolidated subsidiaries is \$11,862,000 less than the equity in net assets of these subsidiaries at December 31, 1979 (\$11,072,000 at December 31, 1978) and this difference is included in the consolidated balance sheet as follows:

	1979	1978
	(000's)	(000's)
Increase (decrease)		
Property, plant and equipment —		
Producing assets		
Plant and equipment .....	\$ (660)	\$ (660)
Accumulated depreciation .....	(450)	(425)
Land and properties .....	6,505	6,505
Accumulated depletion .....	5,847	4,308
Development and preproduction expenditures .....	(10,664)	(10,664)
Accumulated amortization .....	(3,818)	(3,314)
Non-producing assets .....	(6,488)	(6,614)
Investment in associated and other companies .....	67	67
Other .....	957	863
Excess of interest in net assets of subsidiaries over carrying value of investments	<u>\$ (11,862)</u>	<u>\$ (11,072)</u>

The depreciation, depletion and amortization of the fair value adjustments included in the consolidated statement of earnings increased the 1979 depreciation and depletion expenses by a net \$1,514,000 (1978 — \$34,000) and decreased the 1979 and 1978 development and preproduction expenditures by \$504,000 each. (See note 3(b) below).

#### (b) Falconbridge Copper Limited

The fair value adjustment associated with the Company's investment in Falconbridge Copper Limited was fully depleted in 1978 by a charge to earnings of \$59,000.

#### (c) Falconbridge Dominicana, C. por A. (Falcondo)

The ferronickel produced by Falcondo is purchased and marketed by the Company. The earnings of Falcondo include profits on all ferronickel sold to the Company whereas consolidated earnings exclude the profits relating to inventories of ferronickel held by the Company at December 31, for subsequent resale to customers.

#### (d) Other inter-company transactions have been adjusted to prevent duplication.

### 4. Interest in consolidated subsidiary companies' undistributed earnings

See note 11, page 26, of the notes to consolidated financial statements.

### 5. Working capital

See note 9, page 24, of the notes to consolidated financial statements for particulars of funds held in trust in respect of Falcondo.

### 6. Property, plant and equipment

See note 8, page 23, of the notes to consolidated financial statements.

### 7. Market value of Falconbridge's shareholdings

The market values shown are based on Canadian stock exchanges' closing bid prices on December 31, 1979 and December 29, 1978. Because of the number of shares held by Falconbridge (representing control of the companies concerned), the amounts that could be realized if these securities were to be sold may be more or less than their indicated quoted market value.



## STATEMENT OF INVESTMENT IN ASSOCIATED AND OTHER COMPANIES

	Shares		Market value (note 1) (000's)	Carrying value		Contribution to earnings (000's)
	Shares of common stock	Beneficial interest		Shares (000's)	Bonds, notes and advances (000's)	
<b>December 31, 1979:</b>						
Accounted for on an equity basis (notes 2 and 3):						
Akaitcho Yellowknife Gold Mines Limited .	1,198,230	36.7%	\$ 1,929	\$ 262		\$ 88
Giant Yellowknife Mines Limited .....	824,413	19.2	14,839	3,445		1,492
United Keno Hill Mines Limited .....	1,195,989	48.4	48,288	15,910		10,035
Total on an equity basis .....			65,056	19,617		11,615
Accounted for on a cost basis:						
Canadian Superior Oil Ltd. (note 5) .....	294,143	3.2	57,358	17,465		
McIntyre Mines Limited (note 7) .....	175,825	4.8	11,692	10,175		
The Superior Oil Company (note 6) .....	70,000	0.3	10,779	3,118		49
Thompson-Lundmark Gold Mines Limited	600,000	12.0	330	377		
Other companies .....			237			
			<u>\$145,452</u>	<u>50,752</u>		<u>11,664</u>
Investments with no quoted market value —						
Western Platinum Limited (note 4) ....	2,500,001	25.0		6,214		3,793
Other companies .....				344	\$ 27	2,132
				<u>\$ 57,310</u>	<u>\$ 27</u>	<u>\$17,589</u>
				<u>\$ 57,337</u>		
<b>December 31, 1978:</b>						
Accounted for on an equity basis (notes 2 and 3):				(restated)		(restated)
Akaitcho Yellowknife Gold Mines Limited .	1,198,230	36.7%	\$ 851	\$ 234		\$ 62
Giant Yellowknife Mines Limited .....	824,413	19.2	9,172	2,447		613
United Keno Hill Mines Limited .....	1,195,989	48.4	9,568	8,267		1,825
Total on an equity basis .....			19,591	10,948		2,500
Accounted for on a cost basis:						
Canadian Superior Oil Ltd. ....	294,143	3.2	22,796	17,465		
McIntyre Mines Limited .....	175,825	7.2	4,308	10,175		88
The Superior Oil Company .....	14,000	0.3	5,462	3,118		40
Thompson-Lundmark Gold Mines Limited	600,000	12.0	177	377		
Other companies .....			144			
			<u>\$ 52,478</u>	<u>42,083</u>		<u>2,628</u>
Investments with no quoted market value —						
Western Platinum Limited (note 4) ....	2,500,001	25.0		6,214	\$ 5,224	1,008
Other companies .....				344	27	1,115
				<u>\$ 48,641</u>	<u>\$ 5,251</u>	<u>\$ 4,751</u>
				<u>\$ 53,892</u>		

- Notes: 1. The market values shown are based on Canadian and United States of America stock exchanges' closing bid prices on December 31, 1979 and December 29, 1978. Because of the number of shares involved the amounts that could be realized if these securities were to be sold may be more or less than their indicated quoted market value.
2. The carrying value represents the cost of the investments less amounts written off, and also reflects the interest in earnings of certain significantly influenced companies' on an equity basis (i.e., the investments are carried on the balance sheet at cost plus proportionate share of undistributed earnings).
3. Interest in equity accounted for companies' undistributed earnings — see note 11, page 26, of the notes to consolidated financial statements.
4. Income debenture principal repayments of \$1,644,000 were received and the balance, \$3,580,000, plus a currency translation adjustment of \$796,000, was reclassified as a current asset in 1979.
5. See note 13, page 27, of the notes to consolidated financial statements.
6. Stock split 5 for 1 in 1979.
7. Beneficial interest reduced in 1979. The Company sold the rights, to subscribe for additional shares, which it acquired under an offering by McIntyre Mines Limited to all of its shareholders.

# FALCONBRIDGE NICKEL MINES LIMITED

## SUMMARY OF 1979 CONSOLIDATED RESULTS BY QUARTERS

(Unaudited — 000's omitted)

	1979					1978 (restated)
	Three months ended (note 4)				Year	
	March 31	June 30	Sept. 30	Dec. 31		
<b>Metal sales (pounds):</b>						
Integrated Nickel Operations —						
Nickel .....	26,371	29,068	13,567	15,448	84,454	71,341
Copper .....	9,728	8,635	8,905	15,192	42,460	30,027
Cobalt .....	375	367	213	339	1,294	1,255
Falconbridge Copper Limited —						
Copper .....	21,272	21,630	18,387	22,258	83,547	87,555
Zinc .....	22,336	26,009	23,430	19,935	91,710	85,337
Falconbridge Nickel Mines Limited (note 1) —						
Ferronickel (sales to customers) .....	10,590	10,908	10,762	15,368	47,628	43,477
<b>Inventory of finished nickel — all forms (pounds)</b>	33,121	24,576	23,421	27,217	27,217	44,009
<b>Earnings:</b>						
Revenues .....	\$ 172,019	\$ 198,179	\$ 173,020	\$ 246,200	\$ 789,418	\$ 508,211
Interest and investment income .....	5,510	7,723	10,829	15,342	39,404	12,934
	<u>177,529</u>	<u>205,902</u>	<u>183,849</u>	<u>261,542</u>	<u>828,822</u>	<u>521,145</u>
Costs other than the undermentioned .....	120,771	130,109	109,680	142,659	503,219	409,927
Depreciation, depletion, development and preproduction written off .....	10,827	10,492	10,649	10,664	42,632	40,913
Exploration, research and process development .....	3,097	4,596	4,654	5,910	18,257	10,748
Interest and amortization of debt expenses .....	8,553	8,713	9,053	9,770	36,089	33,690
Income and mining taxes .....	13,408	21,894	19,967	35,729	90,998	12,621
Minority interest in earnings of subsidiaries .....	3,771	3,641	5,923	13,731	27,066	7,428
	<u>160,427</u>	<u>179,445</u>	<u>159,926</u>	<u>218,463</u>	<u>718,261</u>	<u>515,327</u>
Earnings for the period before extraordinary item ..	17,102	26,457	23,923	43,079	110,561	5,818
Extraordinary item (note 3) .....	4,129	8,499	2,401	4,971	20,000	
Earnings for the period .....	21,231	34,956	26,324	48,050	130,561	5,818
Dividend requirement on preference shares .....	1,385	1,402	1,464	1,660	5,911	4,732
Earnings applicable to convertible shares .....	<u>\$ 19,846</u>	<u>\$ 33,554</u>	<u>\$ 24,860</u>	<u>\$ 46,390</u>	<u>\$ 124,650</u>	<u>\$ 1,086</u>
Earnings per convertible share:						
Before extraordinary item .....	<u>\$ 3.16</u>	<u>\$ 5.03</u>	<u>\$ 4.51</u>	<u>\$ 8.31</u>	<u>\$ 21.01</u>	<u>22¢</u>
For the period .....	<u>\$ 3.99</u>	<u>\$ 6.73</u>	<u>\$ 5.00</u>	<u>\$ 9.31</u>	<u>\$ 25.03</u>	<u>22¢</u>
<b>Earnings (loss) contributions:</b>						
Falconbridge Copper Limited .....	\$ 4,115	\$ 3,760	\$ 4,585	\$ 10,817	\$ 23,277	\$ 7,498
Falconbridge Dominicana, C. por A. ....	(988)	(990)	1,665	4,821	4,508	(6,596)
Giant Yellowknife Mines Limited .....	90	300	363	739	1,492	613
Indusmin Limited .....	160	813	963	778	2,714	2,027
Oamites Mining Company (Proprietary) Limited .....	492	217	224	427	1,360	405
United Keno Hill Mines Limited .....	492	1,607	2,372	5,564	10,035	1,825
Wesfrob Mines Limited .....	672	577	1,153	2,195	4,597	551
Other controlled companies .....	101	260	392	65	818	102
Total .....	5,134	6,544	11,717	25,406	48,801	6,425
Unallocated corporate (net) (note 2) .....	(193)	(1,706)	(8)	(1,375)	(3,282)	(7,165)
	<u>4,941</u>	<u>4,838</u>	<u>11,709</u>	<u>24,031</u>	<u>45,519</u>	<u>(740)</u>
Integrated Nickel Operations, net of allocated corporate costs .....	12,161	21,619	12,214	19,048	65,042	6,558
Earnings for the period before extraordinary item ..	17,102	26,457	23,923	43,079	110,561	5,818
Extraordinary item (note 3) .....	4,129	8,499	2,401	4,971	20,000	
Earnings for the period .....	21,231	34,956	26,324	48,050	130,561	5,818
Dividend requirement on preference shares .....	1,385	1,402	1,464	1,660	5,911	4,732
Earnings applicable to convertible shares .....	<u>\$ 19,846</u>	<u>\$ 33,554</u>	<u>\$ 24,860</u>	<u>\$ 46,390</u>	<u>\$ 124,650</u>	<u>\$ 1,086</u>

### Notes:

- See note 3, page 30, of the notes to statement of supplementary information.
- Unallocated corporate shown on Statement 4, page 28, for 1979, is after reflecting the interest in earnings of significantly influenced companies, which are accounted for on the equity basis (Giant Yellowknife Mines Limited \$1,492,000; United Keno Hill Mines Limited \$10,035,000; and Akaitcho Yellowknife Gold Mines Limited, included above with "other controlled companies", \$88,000).
- See note 3, page 22, of the notes to consolidated financial statements.
- Escalating metal prices throughout the year are reflected in the quarterly results. Most of the excess refined nickel inventory was sold in the first six months of 1979. Sales were lower in the third and fourth quarters and in better balance with production.



# FALCONBRIDGE NICKEL MINES LIMITED

## TEN-YEAR REVIEW (unaudited) (note 9)

		1979	1978	1977	1976	1975	1974	1973	1972	1971	1970
EARNINGS (LOSS) (000's)	Revenues .....	\$ 789,418	508,211	381,684	483,480	409,888	443,508	426,834	266,851	204,407	214,315
	Earnings (loss), before extraordinary item .....	\$ 110,561	5,818	(28,786)	14,591	2,937	31,996	49,533	5,240	17,255	42,063
	Per convertible share .....	\$ 21.01	0.22	(6.14)	2.94	0.59	6.46	10.00	1.06	3.48	8.49
	Extraordinary item .....	\$ 20,000		20,238				7,100	(49,456)		(475)
	Per convertible share .....	\$ 4.02		4.08				1.43	(9.98)		(0.10)
EARNINGS (LOSS) CONTRIBUTIONS — after consolidation adjustments, before extraordinary items (000's)	Unallocated corporate (note 5) .....	\$ (3,282)	(7,165)	(16,217)	(5,779)	(4,251)	(2,887)	(3,529)	(3,732)		
	Alminex Limited (note 8) .....	\$		3,776	3,424	2,952	2,922	2,040	1,263		
	Falconbridge Copper Limited .....	\$ 23,277	7,498	2,913	1,637	198	3,981	12,295	3,058		
	Falconbridge Dominicana, C. por A. ....	\$ 4,508	(6,596)	2,788	8,834	5,689	3,309	9,933	503		
	Giant Yellowknife Mines Limited .....	\$ 1,492	613	368	(137)	(43)	450	717	181		
	Indusmin Limited (note 6) .....	\$ 2,714	2,027	1,251	2,019	2,821	1,307	1,287	1,290		
	Integrated Nickel Operations .....	\$ 65,042	6,558	(21,496)	4,860	(5,271)	17,779	19,487	5,180		
	Oamites Mining Company (Prop.) Limited ..	\$ 1,360	405	(336)	128	739	1,433	2,406	205		
	United Keno Hill Mines Limited .....	\$ 10,035	1,825	1,168	841	1,422	2,946	1,159	(350)		
	Wesrob Mines Limited .....	\$ 4,597	551	(2,211)	(337)	(1,361)	539	2,753	(2,490)		
	Others (note 6) .....	\$ 818	102	(790)	(899)	42	217	985	132		
	Earnings (loss), before extraordinary item ..	\$ 110,561	5,818	(28,786)	14,591	2,937	31,996	49,533	5,240		
FINANCIAL POSITION (000's)	Working capital —										
	Integrated Nickel Operations (note 7) ...	\$ 228,181	158,825	174,339	85,509	101,731	139,959	117,994	72,487	68,899	
	Falconbridge Dominicana, C. por A. .... (note 1) .....	\$ 56,030	44,578	42,785	37,410	33,703	28,941	36,214	25,680	26,601	
	Falconbridge Copper Limited .....	\$ 85,194	45,525	32,696	24,409	20,768	18,840	25,776	14,044	15,340	
	Consolidated total .....	\$ 380,883	254,784	255,592	155,131	167,017	198,263	188,052	114,813	119,242	
	Property, plant and equipment (net) —										
	Producing .....	\$ 364,636	367,601	304,768	255,217	283,611	282,803	303,767	330,965	160,132	
	Non-producing .....	\$ 105,743	88,913	150,356	167,654	143,178	137,504	105,021	86,507	312,799	
	Long-term debt .....	\$ 287,170	295,003	291,394	223,715	255,121	274,616	288,493	301,921	293,336	
SHAREHOLDERS DATA	Shareholders' equity (000's) .....	\$ 495,921	386,201	384,755	322,440	312,736	314,643	292,556	241,582	290,094	
	Amount per convertible share .....	\$ 83.77	61.94	61.83	64.37	62.47	62.92	58.50	48.32	58.02	
	Dividends paid per convertible share .....	\$ 3.00		0.50	1.00	1.00	2.00	1.00	1.00	2.75	3.50
	Number of convertible shares outstanding at end of year (note 2) (000's) .....	5,025	5,024	5,010	5,009	5,006	5,001	5,001	5,000	5,000	4,955
	Number of convertible shareholders .....	7,362	8,351	9,150	9,788	10,732	11,205	11,104	12,254	12,178	12,273
	Toronto Stock Exchange quotes, High .....	\$ 91.75	36.25	39.75	45.00	38.25	69.75	86.25	99.87	156.00	182.50
	Low .....	\$ 32.00	16.63	16.50	29.25	24.25	23.00	57.00	50.50	56.75	122.25
	Preference shares (000's) .....	\$ 75,000	75,000	75,000							
	Dividends paid per preference share .....	\$ 1.97	1.577	0.564							
EXPLORATION, RESEARCH AND DEVELOPMENT (000's)	Exploration .....	\$ 14,297	7,662	9,726	8,325	7,826	11,432	8,895	6,768	10,246	9,307
	Research and development .....	\$ 3,960	3,086	3,844	3,769	4,100	4,382	3,304	2,546	3,311	4,208
CAPITAL EXPENDITURES (000's)	Expenditures (net) on property, plant, equipment, development and preproduction —										
	Integrated Nickel Operations (note 7) ...	\$ 33,774	26,695	62,267	27,954	38,161	30,442	21,156	36,717	59,474	51,567
	Falconbridge Dominicana, C. por A. ...RDS	\$ 778	722	2,908	1,490	1,934	5,571	2,123	10,400	67,887	67,540
	Falconbridge Copper Limited (note 3) ..	\$ 9,336	4,956	5,415	8,903	7,400	14,968	9,076	3,910	5,968	4,946
	Consolidated total .....	\$ 56,390	41,105	78,848	44,188	56,367	59,315	40,632	61,804	144,862	
METAL SALES (000's pounds)	Integrated Nickel Operations —										
	Nickel .....	84,454	71,341	32,047	80,176	61,524	89,464	99,408	89,665	85,864	84,141
	Copper .....	42,460	30,027	42,677	34,076	40,713	53,981	53,725	56,464	60,985	56,922
	Falconbridge Nickel Mines Limited —										
	Nickel in ferronickel (note 4) .....	47,628	43,477	43,394	59,781	50,270	73,828	67,644			
	Falconbridge Copper Limited (note 3) —										
	Copper .....	83,547	87,555	92,369	82,939	77,503	56,911	80,935	80,870	62,012	50,320
	Zinc .....	91,710	85,337	89,032	73,430	73,767	30,838	37,950	38,218	14,569	10,648
ORE RESERVES (000's tons)	Falconbridge Nickel Mines Limited .....	75,771	78,808	80,670	83,405	89,099	90,578	92,798	92,646	99,933	97,405
	Falconbridge Dominicana, C. por A. ....	68,700	68,500	70,000	72,500	63,700	66,000	68,500	70,800	72,300	62,800
	Falconbridge Copper Limited (note 3) .....	8,565	9,235	8,653	7,187	9,234	11,004	11,287	11,724	11,543	9,777

Notes: 1. See note 9, page 24, of the notes to consolidated financial statements.

2. Includes shares held by consolidated subsidiaries, see note 10, page 26, of the notes to consolidated financial statements.

3. This company was formed through an amalgamation of a number of companies in 1971. For comparative purposes the figures have been presented as if the amalgamation had been in effect in 1970 and 1971.

4. Ferronickel sales to customers, see note 3, page 30, of the notes to statement of supplementary information.

5. Before interest in earnings of equity accounted for companies.

6. For comparative purposes the 1972 to 1975 figures have been restated to combine the contribution of Indusmin Limited and Fahralloy Canada Limited. In 1976, Fahramet Limited, a subsidiary of Indusmin Limited acquired the operating assets of Fahralloy Canada Limited.

7. Includes both the Integrated Nickel Operations and Company's corporate operations, see note 2, page 30, of the notes to statement of supplementary information.

8. Investment sold in 1977.

9. Restated, see note 2, page 22, of the notes to consolidated financial statements.

# FALCONBRIDGE NICKEL MINES LIMITED

## ACCOUNTING FOR INFLATION (unaudited)

The Company has continued this year to present unaudited replacement cost data extracted from its 1979 United States of America's Securities and Exchange Commission (SEC) Form 10-K filing. The amounts disclosed reflect the estimated current replacement cost of inventories and the productive capacity of property, plant and equipment of certain of the Falconbridge group companies, compared with the historic cost of these assets, at December 31, 1979 and 1978. The methods used in arriving at the figures are described in the data provided.

Because of the subjectivity and inherent imprecision of the estimated replacement cost data they should only be viewed as indicative of the order of magnitude of the impact of inflation on Falconbridge's ability to replace its productive assets. The figures should not be interpreted as management's intention to replace existing productive capacity at this time.

The Company believes that it is premature to adjust its reported earnings for the effects of inflation. There has been much activity in the area of accounting for changing prices in the past year or so. The Canadian Institute of Chartered Accountants (CICA) has recently issued an exposure draft "Current cost accounting" which would require Falconbridge to provide supplementary earnings statement data showing the effect of inflation on the business. In the United States, the Financial Accounting Standards Board (FASB) has issued Statement No. 33 "Financial Reporting and Changing Prices" which requires large public companies in the U.S. to disclose income statement data after allowing for changes in the consumer price index and after allowing for the current cost of inventories and fixed assets. Both the CICA and FASB recognize problems unique to the extractive industry in the application of inflation accounting. The Company is continuing to monitor these developments in Canada, the United States and elsewhere.

### (a) Inventories (000's)

	Integrated Nickel Operations	Other subsidiary companies	Total
December 31, 1979			
Inventory of metals:			
Historic cost .....	\$ 66,427	\$ 14,237	\$ 80,664
Replacement cost .....	\$ 93,435	\$ 18,699	\$ 112,134
Inventory of supplies:			
Historic cost —			
Total .....	\$ 14,005	\$ 26,364	\$ 40,369
Deduct:			
Slow moving and capital items .....	1,268	1,730	2,998
Consumables .....	\$ 12,737	\$ 24,634	\$ 37,371
Replacement cost — Consumables .....	\$ 13,729	\$ 24,748	\$ 38,477
December 31, 1978			
Inventory of metals:			
Historic cost .....	\$ 72,704	\$ 11,777	\$ 84,481
Replacement cost .....	\$ 106,760	\$ 14,921	\$ 121,681
Inventory of supplies:			
Historic cost —			
Total .....	\$ 12,481	\$ 21,068	\$ 33,549
Deduct:			
Slow moving and capital items .....	1,800	125	1,925
Consumables .....	\$ 10,681	\$ 20,943	\$ 31,624
Replacement cost — Consumables .....	\$ 12,597	\$ 21,036	\$ 33,633

### (b) Productive capacity (000's)

	Total in the consolidated balance sheet	Historic Cost Amounts for which replace- ment cost data have not been provided (i)	Amounts for which replace- ment cost data have been provided (ii)	Estimated replacement cost (ii)
December 31, 1979				
Property, plant and equipment:				
Producing assets —				
Plant and equipment at cost .....	\$ 626,579	\$ 81,882	\$ 544,697	\$1,315,695
Accumulated depreciation .....	\$ 358,070	\$ 70,985	\$ 287,085	\$ 670,698
December 31, 1978				
Property, plant and equipment:				
Producing assets —				
Plant and equipment at cost .....	\$ 598,055	\$ 79,463	\$ 518,592	\$1,176,345
Accumulated depreciation .....	\$ 331,792	\$ 66,415	\$ 265,377	\$ 608,446

(i) Generally represents the assets of subsidiaries' operating mines which are expected to have short (10 years or less) remaining productive lives.



## ACCOUNTING FOR INFLATION (unaudited) (continued)

(ii) Estimated replacement cost —		Plant and equipment at cost	Accumulated depreciation	Plant and equipment net
December 31, 1979				
Integrated Nickel Operations —				
Historic cost .....	\$ 350,438	\$ 197,025	\$ 153,413	
Replacement cost .....	820,029	450,405	369,624	
*Other subsidiaries —				
Historic cost .....	194,259	90,060	104,199	
Replacement cost .....	495,666	220,293	275,373	
Total —				
Historic cost .....	\$ 544,697	\$ 287,085	\$ 257,612	
Replacement cost .....	<u>\$1,315,695</u>	<u>\$ 670,698</u>	<u>\$ 644,997</u>	
December 31, 1978				
Integrated Nickel Operations —				
Historic cost .....	\$ 331,401	\$ 184,858	\$ 146,543	
Replacement cost .....	727,833	416,579	311,254	
*Other subsidiaries —				
Historic cost .....	187,191	80,519	106,672	
Replacement cost .....	448,512	191,867	256,645	
Total —				
Historic cost .....	\$ 518,592	\$ 265,377	\$ 253,215	
Replacement cost .....	<u>\$1,176,345</u>	<u>\$ 608,446</u>	<u>\$ 567,899</u>	

\*Falconbridge Dominicana, C. por A.; Indusmin Limited; and Lakefield Research of Canada Limited.

To arrive at replacement cost of productive fixed assets, current estimates of costs to construct or purchase were applied or other methods such as calculating replacement cost based on cost per unit of productive capacity were employed. Indices published by governmental and private organizations were applied to the historic cost of recently acquired assets.

(c) Depreciation expense for 1979 and 1978 which would have been recorded if it were estimated on the basis of the average current replacement cost of productive capacity is as follows:

	Depreciation expense (iv)		
	Historic cost basis	Replacement cost basis	
	(ii)	(iii)	(000's)
December 31, 1979 —			
Total charged to earnings .....	\$ 29,275		
Deduct amounts related to assets for which replacement cost data have not been provided .....	5,261		
Amounts related to assets for which replacement cost data have been provided (i)	\$ 24,014	\$ 59,286	
December 31, 1978 —			
Total charged to earnings .....	\$ 28,124		
Deduct amounts related to assets for which replacement cost data have not been provided .....	5,114		
Amounts related to assets for which replacement cost data have been provided (i)	\$ 23,010	\$ 55,599	
(i) December 31, 1979 —			
Integrated Nickel Operations .....	\$ 13,971	\$ 34,545	
* Other subsidiaries .....	10,043	24,741	
Total .....	\$ 24,014	\$ 59,286	
December 31, 1978 —			
Integrated Nickel Operations .....	\$ 12,345	\$ 29,726	
* Other subsidiaries .....	10,665	25,873	
Total .....	\$ 23,010	\$ 55,599	

\*Falconbridge Dominicana, C. por A.; Indusmin Limited; and Lakefield Research of Canada Limited.

(ii) The method of calculation is detailed under note E of the accounting policies on page 16.

(iii) Calculated using a straight-line method.

(iv) The higher estimated depreciation expense under the productive capacity replacement cost basis would probably be partially offset by operational economies.

(d) The difference between the replacement value and historic value of cost of sales is immaterial. Under the "last-in, first-out" method of costing the inventory, current costs are reflected in the consolidated statement of earnings for the Integrated Nickel Operations. The other subsidiaries generally recognize revenues when metals are produced (consequently, the recorded revenues are matched with current costs) or have immaterial product inventories or differences between replacement and historic cost of sales.



**The following pages present a more detailed review of the Integrated Nickel Operations, including the marketing activities of the Company, during 1979. Also included are operating and financial data and commentary thereon for the following major subsidiary and associated companies:**

**Falconbridge Dominicana, C. por A.**  
**Falconbridge Copper Limited**  
**Indusmin Limited**  
**New Quebec Raglan Mines Limited**  
**Giant Yellowknife Mines Limited**  
**Wesfrob Mines Limited**  
**United Keno Hill Mines Limited**  
**Western Platinum Limited**  
**Oamites Mining Company (Proprietary) Limited**  
**Blanket Mine (Private) Limited**



## THE INTEGRATED NICKEL OPERATIONS

The Integrated Nickel Operations include the Canadian Nickel Division, Sudbury, Ontario, the refinery in Norway, and the marketing group consisting of the Marketing Division of the Company, Toronto, Canada, and three subsidiaries operating from Hamilton, Bermuda; Brussels, Belgium; and Pittsburgh, U.S.A.

### Financial Review

The Integrated Nickel Operations contributed a profit of \$65,042,000 in 1979 compared with \$6,558,000 in 1978. This substantial improvement was a result of higher selling prices for all metals, and increased sales volumes and profits from the treatment and sale of custom materials. As the Company sells its products in U.S. dollars, the lower value of the Canadian dollar relative to the United States dollar also had a favourable impact on earnings. Sales of nickel in 1979 totalled 84,454,000 pounds, an increase of 18 per cent over the 71,341,000 pounds sold in 1978. This increase was achieved as a result of a significant reduction of product inventory during the first half of the year and greater production than in 1978. Copper sales increased 41 per cent to 42,460,000 pounds in 1979 due to greater production and the higher copper grades in the ore from the Strathcona Mine copper zone. Higher prices for precious metals contributed significantly to the improved results.

Depreciation and amortization charges in 1979 were higher than in 1978 due to charging depreciation on the new smelter for the full year, compared with only four months in 1978 when the smelter was activated, and increased production from the mines. Expenditures on exploration for nickel in Canada increased from \$1,215,000 in 1978 to \$2,390,000 in 1979. Net interest charges were reduced from \$7,061,000 to \$1,571,000 due to the increase in cash balances and higher interest rates on invested funds. Income and mining tax provisions for the Integrated Nickel Operations were \$33,145,000 in 1979 compared with a credit of \$1,181,000 in 1978 as a result of the higher level of earnings.

The total net expenditures on mines and plants in 1979 with comparative figures for 1978 are set out in the table below:

	1979	1978
Property, plant and equipment	\$17,708,000	\$17,379,000
Development and preproduction	16,066,000	9,316,000
	<u>\$33,774,000</u>	<u>\$26,695,000</u>

### Canadian Nickel Division

#### Operating Review

During 1979, nickel production from the Sudbury Operations was increased by 19 per cent over that of the previous year as a return toward normal production levels was initiated. The Falconbridge and Strathcona Mines operated at full capacity. The East, Onaping and Lockerby Mines, which had been on standby, were re-opened during 1979 and at year end the second roaster-electric furnace line in the smelter was being prepared for operation in January, 1980. North Mine was being prepared for production in 1980. Fraser Mine was under development for production in 1981.

The number of employees at Sudbury Operations increased by 758 during 1979 to a total of 3,642 at year end, including employees laid off in 1978 who wished to return to the Company. A three-year collective agreement was signed with the office, clerical and technical workers represented by the United Steelworkers' Union, Local 6855, effective from March 1, 1979. A three-year collective agreement was signed with the production and maintenance workers represented by the Sudbury Mine, Mill and Smelter Workers' Union, Local 598, effective from August 21, 1979.

#### Government Legislation

The Company was granted exemption by the Ontario Government until December 31, 1989 from a requirement to process in Canada ores mined from certain properties of the Company in Ontario, applicable to the quantity of nickel-copper matte capable of producing not more than

100,000,000 pounds of refined nickel per year. The Company, in recognition of the Ontario Government's desire to create employment by having ores processed in Canada, will have full regard for this objective when considering its future plans.

### Capital Programs

The main capital program in 1979 at Sudbury Operations was the development of the Fraser Mine, involving expenditures of \$11,275,000 for preproduction and capital items.

In addition, approximately \$4,000,000 was spent on the Smelter Environmental Improvement Program in 1979, including the commissioning of the second electric furnace, bringing the total cost of the program, initiated in 1974, to \$83,000,000.

### Ore Production

During the year, 2,762,000 tons of ore were delivered to treatment plants from the Company's mines in the Sudbury area compared with 2,283,000 tons in 1978. Re-opening of the East and Onaping Mines started early in the year while production from Lockerby began in October. By year end, East and Onaping were at full production and Lockerby was at approximately one-third of its capacity. Production from the copper zone of the Strathcona Mine for the year totalled 68,400 tons grading 0.50 per cent nickel and 8.66 per cent copper.



## Ore Reserves

Total proven and probable reserves at the Company's Sudbury Operations decreased during the year. Although new reserves were outlined by exploration drilling, there was a net reduction in reserves due to the ore mined and the re-definition of grades and tonnage limits in some areas.

The following figures include appropriate allowances for mining dilution:

Year	Tons of Ore	Tons of Contained Metal		Average Grade (%)	
		Nickel	Copper	Nickel	Copper
1979 .....	75,771,000	1,117,000	605,000	1.47	0.80
1978 .....	78,808,000	1,162,000	611,000	1.47	0.78

## The Environment

At Falconbridge, Ontario, the new \$3,500,000 waste water and tailings disposal facility reached its normal operating status and met Government standards during its first full year of operation. With the growth of bullrushes and other marshland vegetation, numerous wild fowl and other wild life now inhabit the area. Part of this system has been established as a conservation area.

1979 marked the first full year of operation of the roaster-electric furnace and associated sulphuric acid plant. Operation of this complex has permitted the Company to meet the Ontario Government's timetable for the reduction of emissions from the Falconbridge smelter. Only 15 per cent of the sulphur in the ore mined is now emitted as sulphur dioxide compared with 30 per cent prior to the start-up of the sulphuric acid plant in the latter part of 1978.

## Management

President, Canadian Nickel Division  
and General Manager Sudbury Operations

A. G. Slade

## Falconbridge Nikkelverk Aktieselskap

Production of all metals in 1979 at the Norwegian refinery increased substantially over that of 1978. The production of refined nickel and copper, however, was still below capacity in 1979 because the deliveries of nickel-copper matte from Sudbury Operations were below normal. This was due to curtailment of mining operations at Sudbury in response to high nickel inventories in 1978 and early 1979.

The production of refined cobalt increased appreciably above that of 1978 through the treatment of custom cobalt materials from outside sources.

Negotiations are under way on a new labour agreement to replace the agreement which expires on March 31, 1980.

## Management

Managing Director

E. Wigstol





## MARKETING GROUP

The Falconbridge marketing group includes Falconbridge International Limited based in Hamilton, Bermuda; Falconbridge U.S. Incorporated in Pittsburgh; Falconbridge Europe, S.A. in Brussels, Belgium; and Falconbridge Canada, the Canadian Marketing Division of the Company. Falconbridge products, which include six different forms of nickel as well as copper, cobalt, silver, gold, platinum, lead and zinc, are marketed through this group.

The Falconbridge marketing group increased its staff of specialized and highly qualified personnel during 1979. This group provides access to the wide range of products and facilities within the Falconbridge Group of companies and is now better able to serve customers worldwide.

## Metals Review

### Nickel

The nickel industry in 1979 continued its strong recovery which began in the latter part of the previous year. Shipments by non-Communist producers in 1979 were approximately 1,270 million pounds of nickel in all forms, an increase of 160 million pounds over 1978. Production during the year was raised to meet greater demand and restore inventories to more normal levels. Non-Communist world nickel production in 1979 increased to 1,040 million pounds or about 12 per cent higher than in 1978. Non-Communist world producer inventories declined to 310 million pounds by year-end, a dramatic reduction from the 540 million pounds overhanging the industry at the close of 1978. Some consumer re-stocking occurred in the first half and tapered off toward the year-end.

In the United States, increased activity in the aircraft, stainless and specialty steel industries pushed production to near capacity levels. However, some weakening in the general economy became evident toward the end of the year and it adversely affected some nickel markets, particularly the automotive and appliance sectors.

In Europe, general economic conditions remained relatively strong as industrial production increased 4 to 5 per cent over 1978 levels.

A slight reduction in nickel demand is anticipated in 1980, although this could be counteracted by larger-than-expected increases in consumption in the energy-related sectors and armaments.

### Copper

Estimated non-Communist world refined copper consumption set another record in 1979 and reached a level of 7.5 million metric tons, an increase of approximately 3 per cent over 1978. Refined copper production, on the other hand, was constrained due to Canadian strikes plus operating and transportation problems in the African copper belt. The result was a substantial reduction in refined copper stocks which at year end were near normal operating levels.

### Cobalt

An increase in cobalt supply in 1979 together with a levelling of consumer demand has led to the current softening of the cobalt market. The producer price of cobalt rose from U.S. \$20.00 per pound at the beginning of the year to U.S. \$25.00 per pound by February, and remained at that level until year end.

### Other Metals

The gold upturn of 1978 continued through 1979. There was a major increase in price from a low of U.S. \$217.00 per ounce in late January, 1979, to a high of U.S. \$512.00 per ounce at year end. Silver prices during 1979 proved even more volatile than gold, rising from U.S. \$5.96 per ounce in early January, 1979, to U.S. \$28.00 per ounce at year end. Platinum prices reacted similarly to gold and silver, rising from a low of U.S. \$342.00 per ounce in early January to a high of U.S. \$716.00 per ounce in late December.

## Management

### Falconbridge International Limited

President	W. G. Dahl
Executive Vice-President	E. H. Holm

### Falconbridge Canada

Canadian Marketing Division of Falconbridge Nickel Mines Limited	
President	M. O. Pearce
Vice-President Sales	T. J. Desanti

### Falconbridge U.S. Incorporated

General Manager	R. W. Bain
-----------------	------------

### Falconbridge Europe S.A.

General Manager	J. H. Lilly
-----------------	-------------



## FALCONBRIDGE

Serving  
International Markets

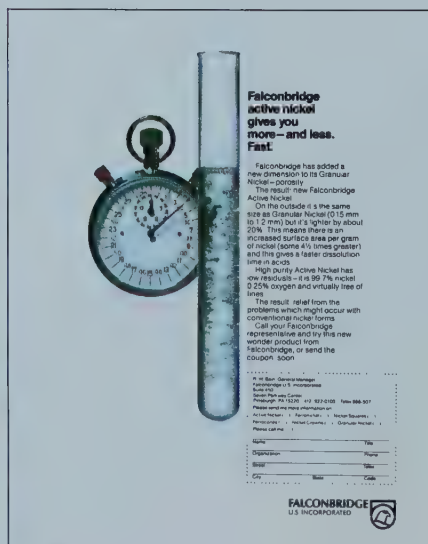
*Extreme left (top to bottom):  
Tapered drums for nickel products;  
copper cathodes and ferronickel ingots.*



## Promoting Falconbridge Products

*Immediate left (top to bottom):  
Nickel Crown brochure, Ferrocone  
and Active Nickel advertisements.*

*Above:  
Outdoor painted bulletin board,  
Pittsburgh, U.S.A.*



*Facing page:  
Unloading boxes of nickel from  
M/V Falcon at Baltimore, U.S.A.*





## MAJOR SUBSIDIARY AND ASSOCIATED COMPANIES

### Falconbridge Dominicana, C. por A.

Net earnings for the year were RD \$8,572,000 of which RD \$429,000 was transferred to the legal reserve. This compares with a net loss of RD \$12,311,000 recorded in 1978. The improved earnings result from the higher price and the increased volume of shipments which prevailed in 1979; however, these factors were partially offset by continuing inflationary pressures on all costs, particularly the escalation in fuel oil prices.

Total shipments in 1979 were 54,130,000 pounds of contained nickel compared with 43,562,000 pounds in 1978. In the first quarter of 1979 the Company re-commissioned a second electric furnace in order to meet the increased market demand and to retain a satisfactory working inventory. Operations were temporarily disrupted in the third quarter when Hurricane David and Tropical Storm Frederic struck the Dominican Republic. The Company's facilities suffered direct and consequential damage of a minor nature which resulted in a short

interruption of production. The loss is covered by the Company's insurance policies.

The long-term debt at December 31, 1979 was RD \$110,534,000, exclusive of RD \$11,144,000 maturing in 1980 which is shown as a current liability. The long-term debt includes an exchange adjustment of RD \$6,269,000 resulting from converting the non-U.S. portion of the loan from the International Bank for Reconstruction and Development (World Bank) at the year-end exchange rates.

The ore reserves at the end of 1979 were 68,700,000 dry short tons grading 1.64 per cent nickel.

The total permanent work force at the end of 1979 numbered 2,130 employees of whom 2,087 were Dominican and 43 were expatriate personnel. A new collective labour agreement was negotiated with employees in the bargaining unit for a period of three years commencing November 27, 1979.

	As at December 31, 1979	
	Outstanding	Held by Falconbridge
<b>Capitalization</b>		
Common shares	3,000,000	1,971,524 65.7%
<b>Production</b>	Year ended December 31	
	1979	1978
Shipments of ferronickel (nickel content in pounds)	54,130,000	43,562,000
<b>Financial</b> (RD\$1.00 equals U.S. \$1.00)		
Revenue from metal shipments	RD\$137,165,000	RD\$ 78,459,000
Earnings before interest on debt, depreciation and amortization	29,914,000	2,742,000
Earnings (loss) after all charges	8,572,000	(12,311,000)
Working capital	48,028,000	37,593,000
Long-term debt (1979 excludes RD\$11,144,000 in current liabilities; 1978 excludes RD\$3,413,000)	110,534,000	121,167,000
<b>Falconbridge interest* in</b>		Per share of Falconbridge
Earnings after all charges	Cdn.\$ 6,492,000	\$1.29
*Before consolidation adjustments		
<b>Management</b>		
President	Marsh A. Cooper	
Executive Vice-President	Ian H. Keith	
Vice-President and General Manager	W. W. Dales	

*Red hot ferrocones fall from continuous-casting conveyor — Bonao, Dominican Republic.*





## MAJOR SUBSIDIARY AND ASSOCIATED COMPANIES

### Falconbridge Copper Limited

Net earnings of \$46,549,000 in 1979 were \$31,491,000 higher than in 1978, reflecting higher metal prices and continued efforts to hold down costs. Working capital increased by \$39,669,000 after payment of dividends of \$7,782,000, fixed asset additions of \$3,810,000, preproduction expenditures of \$5,526,000, and exploration and underground development expenditures of \$4,735,000.

Total metal production from all three divisions of the company was 83,547,000 pounds of copper, 91,710,000 pounds of zinc, 48,000 ounces of gold and 2,346,000 ounces of silver. Copper production decreased by 4,008,000 pounds from the 1978 level, silver by 146,000 ounces, and gold by 15,000 ounces. Zinc production increased by 6,373,000 pounds.

### Lake Dufault Division

Operating profit for the year at the Lake Dufault Division was \$32,275,000, or \$22,003,000 higher than in 1978, primarily because of increased prices for copper and zinc.

Tonnage milled totalled 463,000 tons of 3.6 per cent copper and 4.9 per cent zinc compared with 411,000 tons of 3.36 per cent copper and 3.85 per cent zinc in 1978. During 1979, higher tonnage, higher grades and continued high recoveries resulted in increased production of all metals, compared with 1978. Copper production increased by 5,333,000 pounds to 31,615,000 pounds; zinc production increased by 11,431,000 pounds to 36,878,000 pounds; silver by 101,000 ounces to 489,000 ounces; and gold by 1,700 ounces to 9,600 ounces. Operating costs of \$10,525,000 were held at about the same level as in 1978. Preproduction expenditures on the Corbet Mine amounted to \$16,829,000 at December 31, 1979 of which \$5,524,000 was incurred during the year. This mine commenced production during January, 1980.

Ore reserves at the end of 1979 were calculated to be 3,572,000 tons (including 3,017,000 tons in the Corbet Mine) with average grades of 2.99 per cent copper and 2.13 per cent zinc.

### Opemiska Division

The Opemiska Division achieved an operating profit of \$22,671,000 compared with \$9,891,000 in 1978 due to substantial increases in copper and gold prices, and improved operating efficiencies.

Ore milled in 1979 totalled 1,052,000 tons, 15,000 tons less than in 1978; copper production of 36,322,000 pounds was 4,425,000 pounds below 1978 production; silver production decreased by 57,000 ounces to 302,000 ounces; and gold production decreased by 15,700 ounces to 34,500 ounces.

Ore reserves at December 31, 1979 for the Springer, Perry and Cooke Mines totalled 4,675,000 tons grading 1.89 per cent copper compared with 4,930,000 tons grading 1.85 per cent copper at the end of 1978.

### Sturgeon Lake Joint Venture

The profit of the joint venture in 1979 was \$36,873,000, an increase of \$18,837,000 over that of 1978, with Falconbridge Copper's share after all charges amounting to \$29,499,000. The increase in profit was due to higher metal prices which more than offset the lower production.

Tonnage milled was 412,000 tons, up 4,000 tons from 1978. Production in

1979 at Sturgeon Lake was 16,714,000 pounds of copper, 58,707,000 pounds of zinc, 4,873,000 pounds of lead, 1,665,000 ounces of silver and 4,300 ounces of gold. Production in 1978 was 21,977,000 pounds of copper, 64,122,000 pounds of zinc, 3,824,000 pounds of lead, 1,869,000 ounces of silver and 5,500 ounces of gold.

Ore reserves at December 31, 1979 were 318,000 tons grading 1.71 per cent copper, 7.17 per cent zinc, 1.04 per cent lead, 3.88 ounces of silver and 0.015 ounce of gold per ton.

At year end there were 109 employees at the Sturgeon Lake Joint Venture compared with 118 at the end of 1978. In preparation for the impending closure of operations, severance and transfer policies were developed for hourly-rated employees and staff. Legal notice of the termination of pit operations was given in November, 1979. Detailed plans for environmental rehabilitation of the plant area have been developed in preparation for the termination of operations.

	As at December 31, 1979		
	Outstanding	Held by Falconbridge	
<b>Capitalization</b>			
Common shares	12,970,125	6,509,696	50.2%
	Year ended December 31		
	1979	1978	
<b>Financial</b>			
Revenue from metal shipments	\$204,818,000	\$132,429,000	
Earnings before amortization and depreciation	54,651,000	22,045,000	
Income and mining taxes	47,500,000	17,267,000	
Earnings after all charges	46,549,000	15,058,000	
Dividends paid — 60¢ per share	7,782,000		
— 20¢ per share		2,594,000	
Working capital	85,194,000	45,525,000	
			Per share of Falconbridge
<b>Falconbridge interest* in</b>			
Earnings after all charges	\$ 23,368,000	\$4.65	
Dividends paid	3,906,000	0.78	
Excess of earnings over dividends	\$ 19,462,000	\$3.87	
*Before consolidation adjustments			
<b>Management</b>			
Chairman of the Board	Marsh A. Cooper		
President and Chief Executive Officer	L. C. Kilburn		
Vice-President — Operations	Roger Plasse		
Manager, Opemiska Division	P. R. Dessureault		
Manager, Lake Dufault Division	W. R. Wright		
Manager, Sturgeon Lake Joint Venture	H. R. Graham		



## Indusmin Limited

The following review covers the consolidated operations of the company and its subsidiary companies, Fahramet Limited and Lawson-United Feldspar and Mineral Company.

Sales of \$56,038,000 were achieved in 1979, an increase of 20 per cent over those of the previous record year, 1978. In the company's Minerals Division, a 66-day strike at the St. Canut silica operations in Quebec reduced sales and earnings contributions. Lengthy strikes at the plants of two major silica customers also caused a decline in sales from the St. Canut and Midland silica operations. This was offset, however, by strong sales of lump quartzite to the ferrosilicon industry, silica flour to new markets, and feldspar to the glass industry. Limestone aggregates, for the third successive year, experienced only slight sales growth, reflecting low activity in the Ontario construction industry. In the Fahramet Castings Division, demand for alloy steel castings continued to be favourable.

After-tax consolidated net earnings of \$4,110,000 also established a record, exceeding the 1978 level by 35 per cent. Fahramet provided earnings of \$985,000, while the Lawson-United feldspar and the company's Ontario silica operations also contributed strongly to the year's earnings.

Major modernization and expansion programs were carried out at the Fahramet steel castings foundry in Orillia, Ontario, and at the company's nepheline syenite and Quebec silica

operations. Expenditures of \$4,000,000 provided 34,000 square feet of new foundry space at Fahramet, and the new moulding lines will be brought into production during the first quarter of 1980. A \$1,000,000 expansion of the primary mill at the nepheline syenite operation will provide added capacity. At the Quebec silica operation, a new primary dryer and 1,000-ton dry ore silo were installed

at a cost of \$1,800,000. A \$7,000,000 term loan facility was established by Fahramet at a major Canadian chartered bank, of which \$4,000,000 had been drawn down at year end.

Order bookings at Fahramet were strong throughout the year, assuring full capacity well into 1980. Mineral sales are continuing at very favourable levels.

Capitalization	As at December 31, 1979		
	Outstanding	Held by Falconbridge	
Common shares	1,167,901	806,030	69%

Financial (Consolidated)	Year ended December 31	
	1979	1978
Sales	\$ 56,038,000	\$ 46,686,000
Earnings before amortization and depreciation	6,990,000	5,973,000
Earnings after all charges	4,110,000	3,042,000
Dividends paid — 90¢ per share	1,051,000	1,051,000
Working capital	11,067,000	8,267,000

Falconbridge interest*in	Per share of Falconbridge	
Earnings after all charges	\$ 2,836,000	56¢
Dividends paid	725,000	14
Excess of earnings over dividends	\$ 2,111,000	42¢

\*Before consolidation adjustments

## Management

President and Managing Director	Ian H. Keith
Executive Vice-President	C. M. Woodruff

## New Quebec Raglan Mines Limited

The company's wholly-owned subsidiary, Raglan Quebec Mines Limited, holds exploration permits covering 300 square miles and 157 mineral claims located in the Ungava region of Quebec. No exploration was carried out on the properties during the year. Work at the site was suspended in 1971 and since that time studies have continued on the feasibility of alternate methods of bringing these properties into production. Net expenditures on the properties to date have amounted to \$28,509,000.

Profits which are commensurate with the risks of operating in such a remote northern location must be indicated before development to production. The exploration permits and development licences pertaining to these properties expire in 1982 and the company has no reason to believe that new permits will not be issued.

Estimated ore reserves are 16,050,000 tons grading 2.58 per cent nickel and 0.71 per cent copper.

Capitalization	As at December 31, 1979		
	Outstanding	Held by Falconbridge	
New Quebec Raglan Mines Limited			
Common shares	7,763,908*	5,300,104*	68.3%
Raglan Quebec Mines Limited			
Preferred shares — 6%	7,500,000	7,500,000	100%
— 8%	7,500,000	7,500,000	100%
— 6%	2,396,566**	2,396,566**	100%
Common shares	4,005***		

\*Includes 37 common shares to be issued

\*\*Includes 1,392 6%% preferred shares to be issued

\*\*\*Wholly-owned by New Quebec Raglan Mines Limited

## Management

President	L. C. Kilburn
Vice-President	T. F. Pugsley

## MAJOR SUBSIDIARY AND ASSOCIATED COMPANIES

### Giant Yellowknife Mines Limited

The following review covers the consolidated operations of the company and its subsidiary companies, Lolor Mines Limited and Supercrest Mines Limited.

Consolidated net earnings of \$8,315,000 in 1979 were at a record level, despite higher costs and lower bullion output than in 1978. This increase was attributable mainly to the dramatic rise in the average price received for gold, from \$233 per ounce in 1978 to \$412 per ounce in 1979.

Production rose from 397,000 tons to 416,000 tons; however, total gold output fell from 95,000 ounces to 75,000 ounces as a result of treating lower grade ores in response to the higher price. The grade of ore mined was 0.206 ounce gold per ton versus 0.271 in 1978. Operating expenditures were higher due to continued escalation in costs for power, fuel and other supplies.

Continued improvements were made in reducing emissions from the roaster by more efficient operating procedures.

With the improved gold price, ore reserves were increased substantially. At December 31, 1979 ore reserves were 2,054,000 tons at 0.21 ounce gold per ton compared with 1,216,000 tons at 0.27 ounce gold on December 31, 1978. Diamond drilling added 137,000 tons of new ore to the reserves and the remainder represents additions of lower grade ore. If the price of gold remains strong, further additions to the reserves should be possible.

Exploration continued on the Giant and adjacent properties. Some

encouragement was received on Supercrest ground. Base metal sulphides were encountered over narrow widths in a joint-venture project in Newfoundland, and further drilling is planned. The company entered into a joint venture with United Keno Hill Mines Limited to

explore for precious metals in the United States (Nevada and Utah).

Nine holes were drilled on the company's Sudbury Basin base metal property to provide samples for metallurgical testing.

Capitalization	As at December 31, 1979	
	Outstanding	Held by Falconbridge
Common shares . . . . .	4,303,050	824,413 19.2%
Production (Consolidated)	Year ended December 31	
	1979	1978
Tons milled . . . . .	416,000	397,000
Gold produced — ounces . . . . .	75,000	95,000
Financial (Consolidated)		
Revenue from metals produced . . . . .	\$ 31,129,000	\$ 22,362,000
Earnings before amortization and depreciation . . . . .	8,739,000	4,455,000
Earnings after all charges . . . . .	8,315,000	3,731,000
Dividends paid — 60¢ per share . . . . .	2,582,000	
— 50¢ per share . . . . .		2,151,000
Working capital . . . . .	15,765,000	10,753,000
Falconbridge interest* in	Per share of Falconbridge	
Earnings after all charges . . . . .	\$ 1,596,000	32¢
Dividends . . . . .	495,000	10
Excess of earnings over dividends . . . . .	\$ 1,101,000	22¢
* Before consolidation adjustments, accounted for on an equity basis.		
Management		
President and Managing Director . . . . .	D. J. Emery	
General Manager . . . . .	W. A. Moore	

### Wesfrob Mines Limited

Net earnings for the year were \$4,674,000 compared with \$538,000 in 1978. The higher earnings reflect increased production of iron pellets and improved copper prices.

The production of iron concentrates in 1979 amounted to 579,000 metric tons compared with 508,000 metric tons in 1978. Production of copper increased by 1,405,000 pounds in 1979 to 7,174,000 pounds.

On January 2, 1980 the dissolution of Wesfrob Mines Limited was approved. The operation of the mine will be continued as the Wesfrob Mining Division of Falconbridge Nickel Mines Limited.

Capitalization	As at December 31, 1979	
	Outstanding	Held by Falconbridge
Common shares . . . . .	3,832,994	3,832,994 100%
Production	Year ended December 31	
	1979	1978
Iron concentrates — dry metric tons . . . . .	579,000	508,000
Copper concentrates — dry metric tons . . . . .	16,000	13,000
Copper in concentrate — pounds . . . . .	7,174,000	5,769,000
Financial		
Revenue from metals produced . . . . .	\$ 21,069,000	\$ 13,222,000
Earnings before amortization and depreciation . . . . .	5,545,000	1,956,000
Earnings for the period . . . . .	4,674,000	538,000
Working capital . . . . .	10,187,000	3,828,000
Management		
President . . . . .	P. L. Munro	
Mine Manager . . . . .	C. L. Stafford	



## United Keno Hill Mines Limited

In 1979 the company recorded the most outstanding year in its history.

Earnings were \$20,726,000, an increase of \$16,957,000 over the 1978 level. Revenue from metal shipments increased by \$31,603,000 as the average revenue of \$19.83 per ounce of silver was \$13.16 per ounce higher than in 1978.

Operating costs were 19 per cent higher in 1979 than in the previous year. The major increases were for wages, power and fuel costs, mining development activity and environmental costs.

Silver production of 2,481,000 ounces was 257,000 ounces less than in 1978, due chiefly to lower ore grade from the open-pit operation. The lower grade was partially offset by increased ore tonnage.

Total ore in reserve and in stockpile increased in 1979 to 331,000 tons grading 29 ounces of silver per ton. At year-end 1978, reserves were 246,000 tons grading 31 ounces per ton. The 1979 figure includes 128,000 tons of proven and indicated ore grading 23 ounces of silver per ton from potential open-pit operations (including 79,000

tons of ore in stockpile). Underground ore reserves increased from 110,000 to 203,000 tons grading 33 ounces per ton.

Construction of a third control dam has resulted in a major improvement in effluent water control.

Capitalization	As at December 31, 1979	
	Outstanding	Held by Falconbridge
Common shares .....	2,470,000	1,195,989 48.4%

Production	Year ended December 31	
	1979	1978
Tons ore milled .....	124,000	90,000
Ounces silver produced .....	2,481,000	2,738,000
Pounds lead produced .....	5,620,000	7,521,000

Financial	Year ended December 31	
	1979	1978
Revenue from metal shipments .....	\$ 53,226,000	\$ 21,623,000
Earnings before amortization and depreciation .....	21,573,000	4,338,000
Net earnings .....	20,726,000	3,769,000
Dividends paid — \$2.00 per share .....	4,940,000	
— \$0.70 per share .....		1,729,000
Working capital .....	31,313,000	16,684,000

Falconbridge interest* in	Per share of Falconbridge	
	1979	1978
Earnings after all charges .....	\$ 10,035,000	\$1.99
Dividends paid .....	2,392,000	.47
Excess of earnings over dividends .....	\$ 7,643,000	\$1.52

\* Accounted for on an equity basis

Management	
President and Managing Director	P. L. Munro
Mine Manager	V. E. Smith

## Western Platinum Limited

The profit for the fiscal year ended September 30, 1979 amounted to R6,813,000 compared with a net profit of R3,120,000 in 1978. The profit for the year is determined after allowing for the payment of arrears of interest on loans from shareholders amounting to R10,909,000 (1978 — R400,000). Revenue from metal sales in 1979 amounted to R42,496,000, an increase of 67 per cent over the 1978 revenue, mainly reflecting the higher prices received for precious metals.

As a result of this improvement in precious metal prices, the company increased its development rate and mill throughput. Despite inflationary increases in the costs of power, stores, labour, off-mine refining costs and freight costs, the company held unit production cost increases to a minimum through improved productivity. These efficiencies are reflected in the financial results. Ore milled in 1979 amounted to 1,228,000 metric tons, an increase of 171,000 metric tons from 1978.

During the year ended September 30, 1979, the company made principal repayments of R4,000,000 on its loans

from shareholders. Further principal repayments of R4,000,000 were made by December, 1979.

Capitalization	As at September 30, 1979	
	Outstanding	Held by Falconbridge
Ordinary shares .....	10,000,000	2,500,001 25%
Long term debt .....	R13,800,000	R3,450,000 25%

Production	Year ended September 30	
	1979	1978
Tons milled — metric .....	1,228,000	1,057,000
Platinum group metals — ounces .....	132,000	113,000
Nickel — pounds .....	3,466,000	3,047,000

Financial	Year ended September 30	
	1979	1978
Revenue from metal sales .....	R42,496,000	R25,405,000
Earnings for the year .....	6,813,000	3,120,000
Working capital .....	15,400,000	13,451,000

Management	
Joint Managing Directors	C. P. Beatty S. C. Newman



## MAJOR SUBSIDIARY AND ASSOCIATED COMPANIES

### Oamites Mining Company (Proprietary) Limited

Net earnings of \$2,090,000 for the year were \$1,471,000 higher than in 1978. Production of copper decreased by 1,509,000 pounds and silver by 53,000 ounces. Increases in treatment and refining costs, equipment maintenance expenses and energy-related costs were more than offset by sharp increases in the prices of copper and silver.

During the year, the company entered into an agreement with Falconbridge of South West Africa (Proprietary) Limited to mine the Swartmodder property on a tribute basis. A development decline from the surface was started in November 1979 and is expected to intersect the orebody by mid-1980. Production from this copper orebody will have a favourable impact on the Oamites operation during the latter part of 1980.

At December 31, 1979, proven and probable ore reserves at the Oamites Mine amounted to 2,061,000 metric tons, grading 1.09 per cent copper and 18.47 grams of silver per metric ton, a decrease of 66,000 metric tons from 1978. The ore reserves at the Swartmodder orebody are estimated at approximately 314,000 metric tons grading 2.7 per cent copper.

Production of copper will become progressively lower as tonnage and grade decrease at the Oamites Mine.

The additional production from the Swartmodder property will offset the declining production at Oamites and will

marginally extend the life of the Oamites operation, currently projected at four years.

Capitalization	As at December 31, 1979		
	Outstanding	Held by Falconbridge	
Common shares	253,680	190,000	74.9%

Production	Year ended December 31	
	1979	1978
Tons ore milled (metric)	575,000	615,000
Mill head grade (% copper)	1.18	1.22
Mill recovery (%)	91.93	92.28
Concentrates produced (dry metric tons)	15,800	17,000
Recoverable copper — pounds	13,738,000	15,247,000

Financial		
Revenue from sales of concentrates	\$ 18,495,000	\$ 13,380,000
Earnings before amortization and depreciation	3,285,000	1,601,000
Earnings after all charges	2,090,000	619,000
Dividends paid — \$4.22 per share	1,071,000	
— \$2.03 per share		516,000
Working capital	3,460,000	2,069,000

Falconbridge interest* in			Per share of Falconbridge
Earnings after all charges	\$ 1,565,000		31¢
Dividends paid	802,000		16
Excess of earnings over dividends	\$ 763,000		15¢

\*Before consolidation adjustments

Management		
General Manager	D. P. Hugo	
General Superintendent	R. Jervis	

### Blanket Mine (Private) Limited

Consolidated net earnings in 1979 were \$1,301,000 compared with \$557,000 in 1978. The effect of the higher price of gold, which in 1979 averaged U.S. \$318 per ounce compared with U.S. \$187 per ounce in 1978, was offset by increased energy costs, labour expenses and security costs. Gold production decreased in 1979 by 1,300 ounces to 15,000 ounces.

The 150,000 metric tons milled at the Blanket Mine in 1979 was marginally lower than that of the previous year. The decrease in gold production was due primarily to a drop in grade from 3.99 to 3.86 grams per ton.

During 1979, the company commenced the milling of ore, which was mined on a tribute basis at a property situated near the Blanket Mine.

The development work and production at the R.H.A. Tungsten Mine were suspended indefinitely during 1978, as it was impossible to obtain sufficient technical staff. The mine remained closed during 1979.

The future of operations in Zimbabwe continues to depend largely on political

stability and the availability of technical staff.

Capitalization	As at December 31, 1979		
	Outstanding	Held by Falconbridge	
Common shares	9,208	9,208	100%

Production	Year ended December 31	
	1979	1978
Blanket		
Ore milled — tons (metric)	150,000	153,000
Gold produced — ounces	15,000	16,300
RHA		
Ore milled — tons (metric)	—	17,000
Tungsten concentrates — pounds	—	65,000

Financial			(Canadian dollars)
Net revenue from metals produced	\$ 5,382,000	\$ 3,789,000	
Earnings before depreciation	1,555,000	760,000	
*Earnings after all charges	1,301,000	557,000	
*Dividends paid — \$129.13 per share	1,189,000		
— \$ 85.25 per share		785,000	
Working capital	916,000	571,000	

\*Only dividends received by Falconbridge are reflected in consolidated earnings.

Management		
General Manager	D. Shand	





FALCONBRIDGE



TM

© 1966 FALCONBRIDGE NICKEL MINES LIMITED